

10/602785

(FILE 'CAPLUS' ENTERED AT 12:08:03 ON 21 JUL 2004)

L11 192453 SEA FILE=CAPLUS ABB=ON PLU=ON CELL(S) (HARVEST? OR
OBTAIN? OR ISOL?)
L18 53901 SEA FILE=CAPLUS ABB=ON PLU=ON IMMUNOMODULAT? OR
IMMUNOACTIVATOR OR IMMUNOADJUVANT OR IMMUNOPOTENTIAT? OR
IMMUNOSTIMULAT? OR IMMUN?(5A) (MODULAT? OR ACTIVATOR OR
ADJUVANT OR POTENTIAT? OR STIMULAT? OR ADJUVANT)
L19 369 SEA FILE=CAPLUS ABB=ON PLU=ON L18 AND (DEVICE OR
APPARAT?)
L20 30 SEA FILE=CAPLUS ABB=ON PLU=ON L11 AND L19
L21 2 SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND (PORE OR POROUS
OR LUMEN OR IMPERMEAB? OR SCAFFOLD?)

L21 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 14 Sep 1999

ACCESSION NUMBER: 1999:576757 CAPLUS

DOCUMENT NUMBER: 131:204591

TITLE: Methods and implant **devices** for
modulating the immune response

INVENTOR(S): Cerami, Anthony; Cerami, Carla; Gelber, Cohava;
Dove, David

PATENT ASSIGNEE(S): Applied Vaccine Technologies Corp., USA

SOURCE: PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-------------------|-------------|
| WO 9944583 | A2 | 19990910 | WO 1999-US4637 | 19990302 |
| WO 9944583 | A3 | 19991111 | | |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2322435 | AA | 19990910 | CA 1999-2322435 | 19990302 |
| AU 9930667 | A1 | 19990920 | AU 1999-30667 | 19990302 |
| AU 756951 | B2 | 20030130 | | |
| BR 9908466 | A | 20001205 | BR 1999-8466 | 19990302 |
| EP 1066028 | A2 | 20010110 | EP 1999-912252 | 19990302 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, RO | | | | |
| TR 200003225 | T2 | 20010221 | TR 2000-200003225 | 19990302 |
| JP 2003523308 | T2 | 20030805 | JP 2000-534186 | 19990302 |
| RU 2225197 | C2 | 20040310 | RU 2000-124880 | 19990302 |
| NO 2000004349 | A | 20001030 | NO 2000-4349 | 20000901 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1998-33402 | A2 19980302 |
| | | | US 1999-259929 | A 19990301 |
| | | | WO 1999-US4637 | W 19990302 |

AB The present invention provides methods and **devices** for inducing, **stimulating**, blocking and reducing the **immune** response of a mammal to an antigen, using an implantable **device** which exposes the antigen in a controlled fashion to cells of the immune system. The **device** comprises a **porous** matrix contained within a perforated, **impermeable** container. By manipulating the bioavailability of antigen within the **device**, and the timing of introduction of antigen into the **device** relative to the time of implantation of the **device** within the mammal, a robust and long-term response can be induced against an antigen, or an existing or potential immune response can be down regulated or blocked. The methods and **devices** can be used for therapeutic vaccination, and in non-exposed mammals for prophylactic vaccination. Immunity can be cellular, humoral, or mucosal. Suppression of the immune response is useful for the treatment or prophylaxis of such conditions as allergies, autoimmune disease, and in inducing tolerance mammals to suppress an immune response to transplant antigens. The **device** can also be used for **harvesting** immune **cells** for later reintroduction into the mammal, and for preparing immune serum and hybridomas.

L21 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 23 Jun 1999

ACCESSION NUMBER: 1999:388064 CAPLUS

DOCUMENT NUMBER: 131:23547

TITLE: Polymer-based implantable drug delivery system for cytokines

INVENTOR(S): Geller, Robin Lee; Jhingan, Ashish

PATENT ASSIGNEE(S): Baxter International Inc., USA

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9929261 | A1 | 19990617 | WO 1998-US25125 | 19981130 |
| W: CA, JP | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |

PRIORITY APPLN. INFO.: US 1997-985832 19971205

AB An implantable drug delivery system comprises a semi-permeable chamber and liposome- or ceramic-encapsulated agents, e.g. **immunopotentiating** cytokines. The use of the implantable chamber to house encapsulated therapeutic agents prolongs circulation time of the bioactive agent in a controlled manner. A **porous** wall of semi-permeable chamber is selected from the group consisting of polyethylene, polypropylene, PTFE, cellulose acetate, cellulose nitrate, polycarbonate, polyester, nylon, polysulfone, mixed esters of cellulose, polyvinylidene difluoride, silicone and polyacrylonitrile. Recombinant murine IL-2 and GM-CSF were encapsulated in liposomes containing phosphatidylcholine and

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phosphatidylglycerol (9:1) and their activity against mouse colon carcinoma was tested. With liposomes containing IL-2, optimal results (80% tumor free survival for >60 days) were **obtained** by implanting tumor **cells** (2 x 10⁶ **cells**) and liposomal preps. in sep. **devices**. However, when using liposomes containing GM-CSF, the most effective treatment for delaying and preventing the tumor growth at the challenge site was to combine tumor cells and the liposomal preps. within the same implantable chamber (80% tumor free survival for >60 days). Treatment involving administration of tumor cells and GM-CSF in sep. implantable chamber was also effective (60% tumor free survival for >60 days). In all expts., all of the control animals (that did not receive any implant) developed tumors within 14 days. These results suggested that an antitumor response can be generated using a completely closed system when both cells and liposome encapsulated cytokines are used.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, CABA, AGRICOLA, VETU, VETB' ENTERED AT 12:31:49 ON 21 JUL 2004)

L22 31 S L21
L23 30 DUP REM L22 (1 DUPLICATE REMOVED)

L23 ANSWER 1 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2004-224390 [21] WPIDS
CROSS REFERENCE: 2003-874309 [81]
DOC. NO. CPI: C2004-088549
TITLE: Novel tmst2-receptor polypeptide useful for diagnosing and treating disease e.g., autoimmune disease, cachexia, cancer or viral, bacterial infections.
DERWENT CLASS: A89 B04 D16
INVENTOR(S): SARIS, C
PATENT ASSIGNEE(S): (SARI-I) SARIS C
COUNTRY COUNT: 1
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---------------|------|----------|-----------|----|----|
| US 2004018544 | A1 | 20040129 | (200421)* | | 57 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| US 2004018544 | A1 Provisional | US 1999-143063P | 19990709 |
| | Div ex | US 2000-612033 | 20000707 |
| | | US 2003-622407 | 20030717 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|-----------|------|-----------|
| ----- | | |

Searcher : Shears 571-272-2528

US 2004018544 A1 Div ex

US 6627199

PRIORITY APPLN. INFO: US 1999-143063P 19990709; US
 2000-612033 20000707; US
 2003-622407 20030717

AN 2004-224390 [21] WPIDS

CR 2003-874309 [81]

AB US2004018544 A UPAB: 20040326

NOVELTY - An isolated polypeptide comprising amino acid sequence fully defined tmst2-receptor sequence of 198 (S1) or 180 (S2) amino acids as given in the specification, is new.

DETAILED DESCRIPTION - An isolated polypeptide (I) comprising amino acid sequence chosen from fully defined mature amino acid sequence of 198 (S1) or 180 (S2) amino acids as given in the specification, comprising a mature amino terminus at residue one, optionally further comprising an amino terminal methionine, an amino acid sequence for an ortholog of (S1) or (S2), where the encoded polypeptide has an activity of the polypeptide having (S1) or (S2), a sequence that is 70% identical to (S1) or (S2), where the polypeptide has activity of (S1) or (S2), fragment of (S1) or (S2) comprising at least 25 amino acid residue, where the polypeptide has activity of (S1) or (S2), an amino acid sequence for an allelic variant or splice variant of either (S1) or (S2), or at least one of (a-c), where polypeptide has the activity of (S1) or (S2), or amino acid sequence of (S1) or (S2) having one or more conservative amino acid substitutions, insertions or deletions, having C- and/or N-terminal truncation, and the amino acid sequence having one modification chosen from the amino acid substitutions, insertions, deletions, C-terminal truncation and N-terminal truncation, where the polypeptide has activity of (S1) or (S2), is new.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated nucleic acid molecule (II);
- (2) a vector (III) comprising (II);
- (3) a host cell (IV) comprising (III);
- (4) producing (M1) tmst2-receptor polypeptide;
- (5) a polypeptide produced (M1);
- (6) an antibody (V) produced by immunizing an animal with a peptide comprising an amino acid sequence of (S1) or (S2), and specifically binds (I);
- (7) a hybridoma producing a monoclonal antibody that binds to a peptide comprising an amino acid sequence;
- (8) a selective binding agent or fragment (VI) specifically binding one or more polypeptide, where the polypeptide comprises the amino acid sequence chosen from (S1) or (S2), a fragment of (S1) or (S2) and a naturally occurring variant of (S1) or (S2);
- (9) a selective binding agent or fragment comprising at least one complementary determining region with specificity for a polypeptide having the amino acid sequence;
- (10) a selective binding agent produced by immunizing an animal with (I);
- (11) a hybridoma producing (VI);
- (12) a composition (VIII) comprising (I) or (II) and formulation agent;
- (13) a polypeptide (IX) comprising a derivative of (I);
- (14) a viral vector comprising (II);
- (15) a fusion polypeptide comprising (I) fused to a

heterologous amino acid sequence;

(16) a **device** comprising membrane suitable for implantation, and cells encapsulated within the membrane, where the cell secrete (I) and where the membrane is permeable to (I) and **impermeable** to materials detrimental to the cells;

(17) a **device** comprising membrane suitable for implantation, and tmst2-receptor polypeptide encapsulated within the membrane, where the membrane is permeable to the polypeptide;

(18) a transgenic non-human mammal comprising (II); and

(19) a diagnostic reagent (X) comprising a delectably labeled polynucleotide encoding (S1) or (S2), or its fragment, or its variant or homolog including allelic variants and spliced variants.

ACTIVITY - Antiinflammatory; Antiarthritic; Antirheumatic; Cytostatic; Antianemic; Immunosuppressive; **Immunomodulator**; Anticoagulant; Antidiabetic; Hepatotropic; Cerebroprotective; Neuroprotective; Virucide; Antibacterial; Tuberculostatic; Protozoacide; Anorectic.

MECHANISM OF ACTION - Gene Therapy.

No biological given.

USE - (I) is useful for diagnosing a pathological condition or a susceptibility to a pathological condition in a subject caused by or resulting from abnormal levels of tmst-2-receptor polypeptide, which involves determining the presence or amount of expression of (I), comparing the level of (I) in a biological, tissue, or cellular sample from normal subjects or the subject at an earlier time, where susceptibility to a pathological condition is based on the presence or amount of expression of (I).

(I) is useful for identifying a compound that binds to (I), which involves contacting (I) with a compound, and determining the extent of binding of (I) to the compound. (I) and (II) are useful for treating, preventing or ameliorating a medical condition in a mammal resulting from decreased levels of tmst2-receptor polypeptide, which involves administering (I) or (II) to a patient.

(II) is useful for modulating levels of (I) in an animal, which involves administering (II) to the animal. (IV) is useful for identifying candidate inhibitors of tmst-2 receptor polypeptide activity or production, which involves exposing (IV) to the candidate inhibitors, and measuring tmst2-receptor polypeptide activity or production in the cell, comprising activity or production in the presence and absence of the candidate. (V) is useful for detecting or quantitating the amount of tmst2-receptor polypeptide.

(VI) is useful for treating, preventing, or ameliorating a disease, condition, or disorder comprising administering an effective amount of (VI) to a patient.

(X) is useful for determining the presence of (II) in a biological sample, preferably tissue or cellular sample, which involves providing a biological sample suspected of containing tmst2-receptor nucleic acids, contacting the biological sample with (X) under conditions where (X) hybridizes with (II) contained in the biological sample, detecting hybridization between (II) in the biological sample and the diagnostic reagent, and comparing the level of hybridization between the biological sample and (X) with the level of hybridization between known concentration of tmst2-receptor nucleic acid and the diagnostic reagent (all claimed).

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(I) is useful for treating diseases conditions including acquired-immunodeficiency syndrome (AIDS), anemia, autoimmune diseases, cachexia, cancer, cerebral malaria, diabetes mellitus, disseminated intravascular coagulopathy, erythroid sick syndrome, hemorrhagic shock, hepatitis, insulin resistance, leprosy, leukemia, lymphoma, meningitis, multiple sclerosis, myocardial ischemia, obesity, rejection of transplanted organs, rheumatoid arthritis, septic shock syndrome, stroke, adult respiratory distress syndrome (ARDS), tuberculosis, and a number of viral diseases.
Dwg.0/0

L23 ANSWER 2 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2003-363017 [34] WPIDS
DOC. NO. NON-CPI: N2003-289985
DOC. NO. CPI: C2003-095768
TITLE: **Device useful for modulating immune responses to antigens comprises impermeable biocompatible shell having outer surface with several pores and interior lumen and biocompatible fibrous scaffolding disposed within the lumen.**
DERWENT CLASS: A96 B04 C03 D16 D22 P32
INVENTOR(S): CERAMI, A; CERAMI, C; KOYFMAN, I S; ROSENBLATT, J; TENHUISEN, K S; XIE, Q
PATENT ASSIGNEE(S): (CERA-I) CERAMI A; (CERA-I) CERAMI C; (KOYF-I) KOYFMAN I S; (ROSE-I) ROSENBLATT J; (TENH-I) TENHUISEN K S; (XIEQ-I) XIE Q; (VACC-N) APPLIED VACCINE TECHNOLOGIES CORP
COUNTRY COUNT: 100
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|----|
| WO 2003020161 | A2 | 20030313 | (200334)* | EN | 17 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW | | | | | |
| US 2003118630 | A1 | 20030626 | (200343) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|-----------------|----------|
| WO 2003020161 | A2 | WO 2002-US14759 | 20020509 |
| US 2003118630 | A1 | US 2001-17457 | 20011207 |

PRIORITY APPLN. INFO: US 2001-17457 20011207
AN 2003-363017 [34] WPIDS
AB WO2003020161 A UPAB: 20030529
NOVELTY - An **immune modulation device**

Searcher : Shears 571-272-2528

(2) comprises an **impermeable** biocompatible shell (4) having an outer surface (8) with several **pores** (6) to allow the ingress and egress of immune cells and an interior **lumen** (10) and a biocompatible fibrous **scaffolding** (12) disposed within the interior **lumen**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) **obtaining** immune **cells** from an animal involving **harvesting** immune **cells** from (2) that was implanted within animal to allow immune **cells** to migrate into (2) (the **device** has antigen or chemotatic agent to provoke an immune response); and

(2) manufacturing (2) comprising (4) having (8) and (10) involving placing (12) within (10), and forming (6) within (4) of suitable size to allow the ingress and egress of immune cells.

ACTIVITY - Immunosuppressive; Antidiabetic; Antiallergic; Antirheumatic; Antiarthritic; Neuroprotective; Ophthalmological; Antiinflammatory; Dermatological; Antithyroid.

No biological data given.

MECHANISM OF ACTION - **Immune response modulator**.

USE - For **modulating** the **immune** response in animals (claimed); in the treatment of allergies, autoimmune disease, type I diabetes, rheumatoid arthritis, multiple sclerosis, uveitis, systemic lupus erythematosus, myasthenia gravis and Grave's disease.

ADVANTAGE - At least a part of antigen is bioavailable at the time of or after the **immune modulation device** is implanted into the animal and hence results in inducing or enhancing the immune response of the antigen and suppressing or down regulating existing or potential immune response of the antigen. The **device** comprises polymer having glass transition temperature below physiologic temperature, hence the **device** minimizes irritation when implanted in soft tissues. The shell allows cell ingress, but hinders diffusion of soluble molecules out of **device**, which helps to concentrate cytokines (e.g. lymphokine and chemokine) secreted by cells which have entered the **device** in response to loaded antigens and other cells which are present in the **device**. The **device** has local concentration of cells and cytokines, thus enhances immune response relative to implantation of antigens with standard adjuvants.

DESCRIPTION OF DRAWING(S) - The figure shows **immune modulation device**.

Immune modulation device 2

Shell (10) interior **lumen** 4

Pores 6

Fibrous **scaffolding** 12

Outer surface. 8

Dwg.1/5

L23 ANSWER 3 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2004-119152 [12] WPIDS

CROSS REFERENCE: 2001-611623 [70]; 2002-187704 [24]

DOC. NO. CPI: C2004-047868

TITLE: New nucleic acid encoding a fibroblast growth

factor-like polypeptide is useful to diagnose, treat, ameliorate or prevent associated diseases including epidermolysis bullosa, cirrhosis, hair loss and gastric and duodenal ulcers.

DERWENT CLASS: A96 B04 D16
 INVENTOR(S): ITOH, N
 PATENT ASSIGNEE(S): (ITOH-I) ITOH N
 COUNTRY COUNT: 1
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---------------|------|----------|-----------|----|----|
| US 2003170822 | A1 | 20030911 | (200412)* | | 63 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|-----------|----------------|----------|
| US 2003170822 | A1 CIP of | US 2000-540118 | 20000331 |
| | Cont of | US 2001-822485 | 20010402 |
| | | US 2003-374207 | 20030225 |

PRIORITY APPLN. INFO: US 2001-822485 20010402; US
 2000-540118 20000331; US
 2003-374207 20030225

AN 2004-119152 [12] WPIDS

CR 2001-611623 [70]; 2002-187704 [24]

AB US2003170822 A UPAB: 20040218

NOVELTY - An isolated nucleic acid comprising a sequence encoding a human fibroblast growth factor (FGF) -like polypeptide is new.

DETAILED DESCRIPTION - A new isolated nucleic acid (N1) comprises:

(A) the 554 nucleotide sequence fully defined in the specification (sequence I);

(B) a nucleotide sequence encoding the 170 amino acid sequence fully defined in the specification (sequence II);

(C) a nucleotide sequence which hybridizes under moderate stringency to the complement of (A) or (B) where the encoded polypeptide has an activity of the polypeptide of the 148 amino acid sequence fully defined in the specification (sequence III);

(D) a nucleotide sequence encoding a polypeptide that is at least 70% identical to the polypeptide of sequence III and having an activity of that polypeptide;

(E) a nucleotide sequence encoding an allelic variant or splice variant of sequence I where the encoded polypeptide has an activity of the polypeptide of sequence III;

(F) a nucleotide sequence of (D) or (E) encoding a polypeptide fragment of at least 25 amino acids having an activity of a polypeptide with sequence III;

(G) a nucleotide sequence fully defined in the specification of (D), (E) or (F) comprising a sequence of at least 16 nucleotides;

(H) a nucleotide sequence encoding a polypeptide of sequence III with at least one conservative amino acid substitution, insertion or deletion, or a C terminus or N terminus truncation and having an activity of a polypeptide of sequence III;

(I) a nucleotide sequence comprising a fragment of at least 16 nucleotides of (H);

(J) a nucleotide sequence which hybridizes under moderate stringency to the complement of (D), (E), (F) or (H) and having an activity of the polypeptide of sequence III;

(K) a nucleotide sequence complementary to (D), (E), (F) or (H)
INDEPENDENT CLAIMS are also included for:

(1) a vector comprising N1;
(2) a host cell comprising the above vector;
(3) producing an FGF-like polypeptide comprising culturing the above host cell under suitable conditions to express the polypeptide;

(4) an FGF-like polypeptide produced by the above method;
(5) determining whether a compound inhibits FGF-like polypeptide activity or production comprising exposing the above host cell to the compound and measuring FGF-like polypeptide activity or production in the cell;

(6) an isolated polypeptide (P1) comprising sequence III or comprising:

(a) the mature amino acid sequence of sequence III;
(b) the mature amino acid sequence of sequence III with an amino-terminal methionine;
(c) an amino acid sequence for an ortholog of sequence III having an activity of the polypeptide of sequence III;
(d) an amino acid sequence at least 70% identical to sequence III having an activity of the polypeptide of sequence III;
(e) a fragment of at least 25 amino acids of sequence III having an activity of the polypeptide of sequence III;
(f) an amino acid sequence for an allelic variant or splice variant of sequence II or at least one of (a) -(d) having an activity of the polypeptide of sequence III; or
(g) sequence III with at least one conservative amino acid substitution, insertion, deletion, or a C- and/or N-terminal truncation;

(7) a polypeptide comprising a derivative of P1, optionally covalently modified with a water-soluble polymer;

(8) a fusion protein comprising P1 fused to a heterologous amino acid sequence, preferably an IgG constant domain or fragment;

(9) an isolated polypeptide encoded by N1;

(10) an antibody produced by immunizing an animal with a peptide comprising an amino acid sequence of sequence III;

(11) an antibody that specifically binds P1;

(12) a hybridoma that produces a monoclonal antibody that binds to a peptide comprising an amino acid sequence of sequence III;

(13) detecting or quantitating FGF-like polypeptide using the above antibody;

(14) a selective binding agent produced by immunizing an animal with a polypeptide comprising sequence III;

(15) a hybridoma that produces a selective binding agent capable of binding to a polypeptide encoded by N1;

(16) treating, preventing or ameliorating a medical condition comprising administering P1 or N1 to a patient;

(17) diagnosing a pathological condition or susceptibility to a pathological condition, comprising determining expression of P1 or N1 in a sample;

(18) a device comprising a membrane suitable for implantation

and cells encapsulated within the membrane which secrete P1, where the membrane is permeable to P1 and impermeable to materials detrimental to the cells;

(19) identifying a compound which binds a polypeptide comprising contacting P1 with a compound and determining the extent of binding;

(20) modulating levels of a polypeptide in an animal comprising administering N1; and

(21) a transgenic non-human animal comprising N1.

ACTIVITY - Dermatological; Hepatotropic; Antiinflammatory; Endocrine-Gen.; Antiulcer; Respiratory-Gen.

MECHANISM OF ACTION - None given.

Overexpression of FGF-like polypeptide in transgenic mice resulted in multiple cutaneous papillomatous growths and thymic enlargement (1.92 plus or minus 1.16 versus 0.22 plus or minus 0.8 % of body weight in transgenic and non-transgenic mice, $p=0.012$), moderate splenomegaly (not significantly different) and in one transgenic mouse, marked hepatomegaly (8.18% of its body weight). This suggests FGF-like polypeptide activity related to development, stimulation and/or repair of multiple epithelial tissues.

USE - The invention is useful to diagnose, prevent, treat or ameliorate diseases or conditions associated with FGF-like polypeptide including epidermolysis bullosa, chemotherapy-induced alopecia, male baldness, gastric and duodenal ulcers, erosions of the stomach and esophagus, inflammatory bowel disease such as Chron's disease, hyaline membrane disease of premature infants, smoke inhalation, emphysema, hepatic cirrhosis and thymic epithelial atrophy. The nucleic acids may also be used to map locations of FGF-like gene and related genes on chromosomes.

Dwg.0/5

L23 ANSWER 4 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2004-008943 [01] WPIDS
 DOC. NO. CPI: C2004-002272
 TITLE: Novel ymkz5-receptor polypeptide useful for treating diseases such as tumor, cancer, AIDS, anemia, autoimmune diseases, cachexia, leprosy, leukemia, hepatitis, multiple sclerosis.
 DERWENT CLASS: A96 B04 D16
 INVENTOR(S): ZHANG, K
 PATENT ASSIGNEE(S): (ZHAN-I) ZHANG K
 COUNTRY COUNT: 1
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---------------|------|----------|-----------|----|----|
| US 2003096355 | A1 | 20030522 | (200401)* | | 57 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| US 2003096355 | A1 Provisional | US 1999-143137P | 19990709 |
| | Cont of | US 2000-611989 | 20000707 |
| | | US 2002-193616 | 20020711 |

PRIORITY APPLN. INFO: US 1999-143137P 19990709; US
 2000-611989 20000707; US
 2002-193616 20020711

AN 2004-008943 [01] WPIDS

AB US2003096355 A UPAB: 20040102

NOVELTY - An isolated polypeptide (ymkz5-receptor) comprising a fully defined sequence of 176 amino acids as given in the specification, is new.

DETAILED DESCRIPTION - An isolated polypeptide (ymkz5-receptor) (I), comprising

(a) a fully defined sequence (1) of 176 amino acids as given in the specification;

(b) mature amino acid sequence of (1) comprising a mature amino terminus at residue 1, optionally comprising an amino-terminal methionine, an amino acid sequence for an ortholog of (1), where the encoded polypeptide has an activity of polypeptide having (1), an amino acid sequence that is at least 70% identical to (1), where the polypeptide has an activity of polypeptide having (1), a fragment of (1) having at least about 25 amino acid residues, where the polypeptide has an activity of polypeptide having (1), and an amino acid sequence for allelic variant or splice variant of either (1) or any one of the above, where the polypeptide has an activity of polypeptide having (1); or

(c) (1) having one conservative amino acid substitution, insertion, deletion, C-and/or N-terminal truncation or a modification chosen from the above, where the polypeptide has an activity of polypeptide having (1).

INDEPENDENT CLAIMS are also included for the following:

(1) isolated nucleic acid molecule (II) comprising a nucleotide sequence chosen from a fully defined sequence (2) of 967 nucleotides as given in the specification, a nucleotide sequence encoding (I), a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of the above, where the encoded polypeptide has the activity of (I), and a nucleotide sequence complementary to any one of the above;

(2) isolated nucleic acid molecule (III) comprising a nucleotide sequence chosen from a nucleotide sequence encoding a polypeptide that is at least about 70% identical to (I), where the polypeptide has the activity of (I), a nucleotide sequence encoding an allelic variant or splice variant of (2), where the polypeptide has the activity of (I), (2) encoding a polypeptide fragment of at least about 25 amino acid residues, where the polypeptide has the activity of (I), a nucleotide sequence complementary to any one of the above, any one of the above comprising a fragment of at least 16 nucleotides, and a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any one of the above, where the polypeptide has the activity of (I);

(3) isolated nucleic acid molecule (IV) comprising a nucleotide sequence chosen from a nucleotide sequence encoding (I) having one conservative amino acid substitution, insertion, deletion or C-and/or N-terminal truncation, where the polypeptide has the activity of (I), a nucleotide sequence complementary to any one of the above, a nucleotide sequence of any one of the above having a fragment of about 16 nucleotides, and a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the

complement of any one of the above, where the polypeptide has the activity of (I);

- (4) vector (V) comprising (II), (III), or (IV);
- (5) host cell (VI) comprising (V);
- (6) producing (I);
- (7) polypeptide (VII) produced by the host cell;
- (8) isolated polypeptide (VIII) encoded by (II), (III), or (IV);
- (9) antibody (IX) produced by immunizing an animal by a peptide comprising (I);
- (10) antibody or its fragment (X) that specifically binds (I);
- (11) hybridoma that produces a monoclonal antibody that binds to a peptide comprising (I);
- (12) selective binding agent or its fragment (XI) that specifically binds at least one polypeptide such as (I), a fragment of (I), or a naturally occurring variant of any one of the above;
- (13) selective binding agent or its fragment (XII) comprising at least one complementary determining region with specificity for a polypeptide having (I);
- (14) (XII) produced by immunizing an animal with a polypeptide comprising (I);
- (15) hybridoma producing a selective binding agent capable of binding a polypeptide of (II), (III), or (IV);
- (16) composition (XIII) comprising (I) and a formulation agent;
- (17) polypeptide (XIV) comprising a derivative of (I);
- (18) composition (XV) comprising (II), (III), or (IV) and a formulating agent;
- (19) viral vector comprising (II), (III), or (IV);
- (20) fusion polypeptide (XVI) comprising (I) fused to a heterologous amino acid sequence;
- (21) **device** comprising a membrane suitable for implantation, and cells encapsulated within the membrane, where the cells secrete (I), where the membrane is permeable to the protein and **impermeable** to materials detrimental of the cells, or the ymkz5-receptor polypeptide encapsulated within the membrane, where the membrane is permeable to the polypeptide;
- (22) transgenic non-human mammal comprising (II), (III), or (IV); and
- (23) diagnostic reagent (XVII) comprising a detectably labeled polynucleotide encoding (I), or a fragment, variant or its homolog including allelic variants and its spliced variants.

ACTIVITY - Cytostatic; Anti-HIV; Antianemic; Immunosuppressive; Immunomodulator; Hepatotropic; Antiinflammatory; Virucide; Neuroprotective; Anorectic.

MECHANISM OF ACTION - Modulator of (I); Gene therapy (claimed). No supporting data is given.

USE - (I) is useful for identifying a compound that binds to a polypeptide. (I), (II), (III), or (IV) is useful for treating, preventing or ameliorating a condition resulting from decreased levels of (I); for diagnosing a (susceptibility to a) pathological condition caused by or resulting from abnormal levels of (I). (II), (III), or (IV) is useful for modulating levels of a polypeptide in an animal. (IX) or (X) is useful for detecting or quantitating the amount of (I) using the anti-ymkz5-receptor antibody or fragment of (IX) or (X). (XI) is useful for treating, preventing or ameliorating a disease, condition or disorder. (II), (III), (IV), or (XVII) is

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useful for determining or detecting the presence of ymkz5-receptor nucleic acids in a biological sample (tissue or cellular sample) using hybridization techniques. The polynucleotide molecule is DNA or RNA (all claimed). (I) is useful for detecting diseases or susceptibility to diseases related to the presence of mutated ymkz5-receptor gene such as tumors or cancers. (I) is used as medication for a number of diseases such as AIDS, anemia, autoimmune diseases, cachexia, leprosy, leukemia, hepatitis, multiple sclerosis, myocardial ischaemia, obesity, etc. (II), (III), or (IV) is used as anti-sense inhibitors of expression of (I), as hybridization probes in diagnostic assays, or useful for gene-therapy.

Dwg.0/1

L23 ANSWER 5 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2003-210027 [20] WPIDS
 DOC. NO. CPI: C2003-053415
 TITLE: Implant for **modulating immune**
 response in animals, comprises **impermeable**
 shell having outer surface with **pores** of
 suitable size, interior **lumen**, and
 fibrous **scaffolding** disposed within the
lumen.
 DERWENT CLASS: A96 B04 B07 C06 C07 D16 D22
 INVENTOR(S): KOYFMANN, I S; ROSENBLATT, J; TENHUISEN, K S;
 KOYFMAN, I S
 PATENT ASSIGNEE(S): (KOYF-I) KOYFMAN I S; (ROSE-I) ROSENBLATT J;
 (TENH-I) TENHUISEN K S; (ORTH) ORTHO-MCNEIL PHARM
 INC
 COUNTRY COUNT: 101
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|---|----------|-----------|----|----|
| WO 2002092054 | A2 | 20021121 | (200320)* | EN | 20 |
| RW: | AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | |
| MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW | | | | | |
| W: | AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ | | | | |
| DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP | | | | | |
| KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ | | | | | |
| NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ | | | | | |
| UA UG UZ VN YU ZA ZM ZW | | | | | |
| US 2003068812 | A1 | 20030410 | (200327) | | |
| EP 1387670 | A2 | 20040211 | (200411) | EN | |
| R: | AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK | | | | |
| NL PT RO SE SI TR | | | | | |
| KR 2003096381 | A | 20031224 | (200426) | | |
| US 2004086517 | A1 | 20040506 | (200430) | | |
| BR 2002009552 | A | 20040504 | (200431) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2002092054 | A2 | WO 2002-US8872 | 20020321 |
| US 2003068812 | A1 Provisional | US 2001-290542P | 20010511 |

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| | | | |
|---------------|----------------|-----------------|----------|
| EP 1387670 | A2 | US 2002-103087 | 20020321 |
| | | EP 2002-733878 | 20020321 |
| | | WO 2002-US8872 | 20020321 |
| KR 2003096381 | A | KR 2003-714661 | 20031111 |
| US 2004086517 | A1 Provisional | US 2001-290542P | 20010511 |
| | Div ex | US 2002-103087 | 20020321 |
| | | US 2003-602924 | 20030624 |
| BR 2002009552 | A | BR 2002-9552 | 20020321 |
| | | WO 2002-US8872 | 20020321 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| EP 1387670 | A2 Based on | WO 2002092054 |
| BR 2002009552 | A Based on | WO 2002092054 |

PRIORITY APPLN. INFO: US 2001-290542P 20010511; US
2002-103087 20020321; US
2003-602924 20030624

AN 2003-210027 [20] WPIDS
AB WO 200292054 A UPAB: 20030324

NOVELTY - An **immune modulation device**

(2) that is suitable for use in **modulating** an **immune** response in animals, comprises an **impermeable** biocompatible shell (4) having an outer surface (8) with several **pores** (6) of suitable size to allow the ingress and egress of immune cells, an interior **lumen** (10), and a biocompatible fibrous **scaffolding** (12) disposed within the interior **lumen**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for manufacturing (2), by placing a fibrous **scaffolding** within an interior **lumen** of the **impermeable** biocompatible shell, and forming **pores** within the biocompatible **impermeable** shell of suitable size to allow the ingress and egress of immune cells.

ACTIVITY - Antibacterial; Antiallergic; Fungicide; Protozoacide; Amebicide; Tuberculostatic; Virucide; **Immunomodulator**. No supporting data is given.

MECHANISM OF ACTION - None Given.

USE - (2) is useful for **modulating** the **immune** system in an animal. Suppression of immune response using (2) is desirable to treat conditions such as allergies, or to prepare patients for the exposure of foreign antigens, such as for a transplant. (2) is particularly useful for mammals undergoing whole body radiation therapy.

ADVANTAGE - (2) boosts the immunization, and generates the immune response more quickly. In addition, a short time is required to immunize animals, and the monoclonal antibodies are generated rapidly, by using (2).

DESCRIPTION OF DRAWING(S) - The figure shows the drawing of the **immune modulating device**.

Immune modulation device 2

Shell 4

Pores 6

Outer surface 8

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Interior lumen 10
 Fibrous scaffolding 12
 Dwg.1/5

L23 ANSWER 6 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-566799 [60] WPIDS
 CROSS REFERENCE: 2001-441762 [47]
 DOC. NO. CPI: C2002-160751
 TITLE: **Isolating** a spore-like **cell**
 from a biological tissue, for use in treating e.g.
 a skin disorder, tumor or diabetes, comprises
 separating the spore-like **cell** from
 differentially or partially differentially
cells that have died.
 DERWENT CLASS: B04 D16
 INVENTOR(S): VACANTI, C A; VACANTI, M P; VACANTI, C; VACANTI, M
 PATENT ASSIGNEE(S): (VACA-I) VACANTI C A; (VACA-I) VACANTI M P;
 (UYMA-N) UNIV MASSACHUSETTS MEDICAL CENT
 COUNTRY COUNT: 98
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|----|
| WO 2002057428 | A1 | 20020725 | (200260)* | EN | 65 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ | | | | | |
| DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP | | | | | |
| KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ | | | | | |
| NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA | | | | | |
| UG US UZ VN YU ZA ZW | | | | | |
| US 2002151050 | A1 | 20021017 | (200270) | | |
| AU 2002246662 | A1 | 20020730 | (200427) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2002057428 | A1 | WO 2001-US48340 | 20011030 |
| US 2002151050 | A1 Provisional | US 2000-244347P | 20001030 |
| | | US 2001-20778 | 20011030 |
| AU 2002246662 | A1 | AU 2002-246662 | 20011030 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2002246662 | A1 Based on | WO 2002057428 |

PRIORITY APPLN. INFO: US 2000-244347P 20001030; US
 2001-20778 20011030

AN 2002-566799 [60] WPIDS
 CR 2001-441762 [47]
 AB WO 200257428 A UPAB: 20040426
 NOVELTY - **Isolating** (M1) a spore-like **cell** from
 a biological tissue or fluid comprises:

(1) **obtaining** a tissue or fluid that has been exposed to an environment in which differentiated or partially differentiated **cells** in the tissue or fluid die; and

(2) separating the spore-like cells from the differentiated or partially differentiated cells that have died.

ACTIVITY - Dermatological; Cytostatic; Antidiabetic; Ophthalmological; Auditory; Nephrotropic; Hepatotropic; Cardiant; Pulmonary; Nootropic; Neuroprotective; **Immunomodulatory**; Muscular; Periodontal.

No suitable biological data is given.

MECHANISM OF ACTION - Tissue engineering.

USE - The method is used for **isolating** a spore-like **cell** from a biological tissue or fluid (claimed). The **cell** can be used to treat a skin disorder, tumor or diabetes. The **cell** can be used to treat a patient who has a deficiency of functional **cells** in e.g. the retina, auditory system, nasal epithelium, alimentary canal, pancreas, gallbladder, bladder, kidney, liver, heart, lung, nervous system, reproductive system, endocrine system, immune system, bone, muscle, tooth, nail, or skin. The **cells** can be used to study cellular differentiation, or to detect a compound that has an adverse effect on differentiation.

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L23 ANSWER 7 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-627237 [67] WPIDS
 DOC. NO. CPI: C2004-012573
 TITLE: New isolated calcium-signal cyclophilin ligand (CAML)-binding peptide which binds to CAML and inhibits calcium influx, resulting in inhibition of apoptosis and inflammation, for treating an inflammatory disease.
 DERWENT CLASS: B04 D16
 INVENTOR(S): GRANT, J R; JEFFERIES, W A; MOISE, A R; VITALIS, T Z
 PATENT ASSIGNEE(S): (UYBR-N) UNIV BRITISH COLUMBIA
 COUNTRY COUNT: 99
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|----|
| WO 2002046231 | A2 | 20020613 | (200267)* | EN | 45 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ | | | | | |
| DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP | | | | | |
| KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ | | | | | |
| NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA | | | | | |
| UG US UZ VN YU ZA ZM ZW | | | | | |
| AU 2002015753 | A | 20020618 | (200267) | | |
| CA 2325610 | A1 | 20020607 | (200267) | EN | |
| CA 2335411 | A1 | 20020902 | (200271) | EN | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-----------|------|-------------|------|
|-----------|------|-------------|------|

Searcher : Shears 571-272-2528

| | | | |
|---------------|----|-----------------|----------|
| WO 2002046231 | A2 | WO 2001-CA1769 | 20011207 |
| AU 2002015753 | A | AU 2002-15753 | 20011207 |
| CA 2325610 | A1 | CA 2000-2325610 | 20001207 |
| CA 2335411 | A1 | CA 2001-2335411 | 20010302 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|------------|---------------|
| AU 2002015753 | A Based on | WO 2002046231 |

PRIORITY APPLN. INFO: US 2001-316254P 20010904; CA
 2000-2325610 20001207; CA
 2001-2335411 20010302

AN 2002-627237 [67] WPIDS

AB WO 200246231 A UPAB: 20040426

NOVELTY - An isolated calcium-signal modulating cyclophilin ligand (CAML)-binding peptide (I) comprising a sequence of a domain corresponding to one of the adenovirus E3/6.7L domains that are capable of interacting with CAML (the domains being collectively termed as a 6.7-effector domain (SED)), is new.

DETAILED DESCRIPTION - A CAML ligand (I) comprises a sequence of amino acids defined by the motif (F1), providing that the ligand does not comprise more than 100 contiguous amino acids of native transmembrane activator and CAML interactor (TACI).

Cys-Cys-x(2)-(Phe/Ile/Leu/Val)-(Ala/Cys/Val)-x(2)-(Cys/Ser)-x(3)-(Lys/Arg)-(Lys/Arg) (F1)

x = any amino acid;

a bracketed numeral = number of or a range of numbers of any amino acid represented by x;

a single letter other than x = a specific amino acid identified by standard single letter amino acid code; and

a bracketed set of two or more single letters = alternate specific amino acids at a single position.

INDEPENDENT CLAIMS are also included for the following:

(1) a chimeric peptide (II) comprising (I) and a heterologous peptide;

(2) an isolated nucleic acid (III) encoding (I) or (II);

(3) an isolated nucleic acid (IV) encoding (I) and one or more peptides heterologous to (I);

(4) a vector (V) comprising (III) or (IV);

(5) a cell (VI) comprising (III) or (IV) or (V);

(6) a viral vector (VII) comprising (III) or (IV);

(7) a medicament, implantable medical **device** or implantable medical material comprising (I), (II), (III), (IV), or (V), the implantable medical **device** or material being gauze, membrane, a catheter, an adventitial wrap, an artificial graft, a stent or a shunt; and

(8) binding (M1) a ligand to CAML, comprising combining CAML with a ligand which comprises a peptide defined by the amino acid motif (F1).

ACTIVITY - Antiinflammatory; Immunostimulant; Immunosuppressive; Nootropic; Neuroprotective; Vasotropic. The biological activity of (I) was tested indirectly using the adenoviral vector E3/6.7K in viral plaque assays. One group of mice

were infected intranasally with 107 plaque-forming units (pfu) of wild-type virus (Ad5wt), while the other group of mice was infected intranasally with 107 pfu of dl739 (E3/6.7K deletion virus). The animals were sacrificed in 2 hours, 1, 3 and 7 days post infection (p.i). The left lung was removed and used for viral plaque assays. The result showed that presence of E3/6.7K resulted in more persistent viral titers during the course of infection by comparing mice infected with the dl739 to mice infected with the wild type virus (Ad5wt). The titers of dl739 were significantly higher than AD5 wild type one day after inoculation. Over time, the titers of dl739 decreased as the virus was cleared. In contrast, Ad5wt titers did not change significantly over the 7 day experimental period. The rapid reduction of dl739 over the seven day period is attributed to a strong host response due to the increased inflammation in the absence of E3/6.7K. Inflammation of the perivascular region of the blood vessels and the adventitia of the airways was greater in animals infected with dl739 than in animals infected with Ad5wt over the seven days experimental period. There was also a significant increase in inflammation from day three to day seven for both type of viruses.

MECHANISM OF ACTION - Gene therapy; Apoptosis and inflammation inhibitor; Ca²⁺ influx inhibitor.

USE - (I) comprising a sequence of amino acids defined by a motif (F1), is useful for CAML-binding (claimed). A method of targeted binding of a group or ligand to CAML, using (I), is useful for **modulating** an **immune** response and **modulating** (inhibiting or inducing) apoptosis, or for treating inflammation. The method is also useful for treating a mammalian patient suffering from a degenerative (e.g. neurodegenerative) disease, an **immunodeficiency**, or an inflammatory disease by **modulation** of **immune** response or apoptosis. (I) is also useful in an ex vivo method for **modulating** an **immune** response or programmed **cell** death in a tissue or **cell** population in a patient. The nucleic acid encoding (I) or vector comprising (I) is also useful for inducing or inhibiting apoptosis, for **modulating** an **immune** or inflammatory response, etc. (I) is also useful for biologically stenting a traumatized mammalian vessel, inhibiting or reducing vascular remodeling of the vessel, inhibiting or reducing vascular smooth muscle **cell** proliferation, etc. (I) is also useful for inhibiting diminution of vessel **lumen** diameter. Nucleic acid (III) encoding (I), or an **isolated** nucleic acid (IV) encoding (I) and one or more peptides heterologous to (I), is useful for treatment purposes, such as gene therapy or to minimize transplant rejection, and for use in recombinant expression of (I) or proteins comprising (I).
Dwg.0/2

L23 ANSWER 8 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-557544 [59] WPIDS
 DOC. NO. CPI: C2002-158234
 TITLE: Transforming growth factor beta-related
 polypeptides, useful for diagnosing, treating and
 preventing gastric or duodenal ulcers, burns, and
 impaired fertility.
 DERWENT CLASS: B04 D16

10/602785

INVENTOR(S): JING, S
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC; (JING-I) JING S
 COUNTRY COUNT: 98
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|-----|-----|
| WO 2002044379 | A2 | 20020606 | (200259)* | EN | 126 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2002019947 | A | 20020611 | (200264) | | |
| US 2002151695 | A1 | 20021017 | (200270) | | |
| EP 1339847 | A2 | 20030903 | (200365) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR | | | | | |
| JP 2004514448 | W | 20040520 | (200434) | 202 | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2002044379 | A2 | WO 2001-US44866 | 20011128 |
| AU 2002019947 | A | AU 2002-19947 | 20011128 |
| US 2002151695 | A1 Provisional | US 2000-253476P | 20001128 |
| | | US 2001-995515 | 20011128 |
| EP 1339847 | A2 | EP 2001-998207 | 20011128 |
| | | WO 2001-US44866 | 20011128 |
| JP 2004514448 | W | WO 2001-US44866 | 20011128 |
| | | JP 2002-546727 | 20011128 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2002019947 | A Based on | WO 2002044379 |
| EP 1339847 | A2 Based on | WO 2002044379 |
| JP 2004514448 | W Based on | WO 2002044379 |

PRIORITY APPLN. INFO: US 2000-253476P 20001128; US
 2001-995515 20011128

AN 2002-557544 [59] WPIDS

AB WO 200244379 A UPAB: 20021031

NOVELTY - An isolated polypeptide (I) with a fully defined human transforming growth factor beta -related (TGF- beta -R) polypeptide sequence of 140 (S2) or 195 (S4) amino acids given in the specification, or an amino acid sequence encoded by the DNA insert in ATCC deposit number PTA 2665 or PTA 2666, its allelic or splice variant, ortholog, fragment or mutant, is new.

DETAILED DESCRIPTION - An isolated human transforming growth factor beta -related (TGF- beta -R) polypeptide comprises an amino acid sequence:

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(a) of (S2) or (S4) or an amino acid sequence encoded by the DNA insert (D) in ATCC deposit number PTA 2665 or PTA 2666;
 (b) for an ortholog of (S2) or (S4);
 (c) which is at least about 70% identical to (S2) or (S4);
 (d) for an allelic variant or splice variant of (S2) or (S4),
 the nucleotide sequence of DNA insert in (D), or sequence of (b) or (c);

(e) of (S2) or (S4) with at least one:
 (i) conservative amino acid substitution;
 (ii) amino acid insertion;
 (iii) amino acid deletion;
 (iv) a C- and/or N-terminal truncation; or
 (v) at least one of the above mentioned modification of amino acid substitution, amino acid insertion, amino acid deletion, C-terminal truncation, or N-terminal truncation, where the polypeptide has an activity of (S2) or (S4).

Alternatively, (I) is a fragment of the amino acid sequence of (S2) or (S4) comprising at least about 25 amino acid residues, where the fragment has an activity of (S2) or (S4), or is antigenic.

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid molecule (II) comprising a nucleotide sequence:

(a) which has a fully defined sequence of 665 (S1) (cDNA sequence for isoform 1 of human TGF- beta -R gene) or 810 (S3) (cDNA sequence for isoform 2 of human TGF- beta -R gene) nucleotides as given in the specification;

(b) nucleotide sequence of (D);

(c) encoding the polypeptide sequence of (S2) or (S4);

(d) encoding a polypeptide which is at least about 70% identical to (S2) or (S4), where the polypeptide has an activity of (S2) or (S4);

(e) encoding for an allelic or splice variant of (S1) or (S3) or nucleotide sequence of (D), or nucleotide sequence of (d);

(f) which is a region of (S1) or (S3) or nucleotide sequence of (D), or nucleotide sequence of (d) or (e) encoding a polypeptide fragment of at least 25 amino acid residues, where the polypeptide fragment has an activity of (S2) or (S4), or is antigenic;

(g) a region of (S1) or (S3), the sequence of (D), or nucleotide sequence of (d)-(f), comprising a fragment of at least 16 nucleotides;

(h) a nucleotide sequence that hybridizes under moderately stringent conditions to (a)-(g);

(i) complementary to any of (a)-(g);

(j) encoding a polypeptide having a sequence of (S2) or (S4) with modifications;

(k) comprising a fragment of at least 16 nucleotides;

(l) which hybridizes under moderately stringent conditions to (j) or (k); or

(m) which is complementary to (j);

(2) a vector (III) comprising (II);

(3) a host cell (IV) comprising (III);

(4) preparation of (I) by recombinant techniques;

(5) a recombinant (I) produced by the above mentioned method;

(6) an isolated polypeptide encoded by (II);

(7) a selective binding agent (V) or its fragment comprising at least one complementarity determining region (CDR) with specificity

for a polypeptide having the amino acid sequence of (S2) or (S4), and which specifically binds (I), where (V) is produced by immunizing an animal with a polypeptide comprising a sequence of (S2) or (S4);

(8) a hybridoma which produces (V);

(9) a kit for detecting or quantitating the amount of TGF- beta -R polypeptide in a biological sample comprising (V);

(10) a composition (C) comprising (I) or (II) and a formulation agent;

(11) a polypeptide comprising a derivative of (I);

(12) a viral vector comprising (II);

(13) a fusion polypeptide (VI) comprising (I) fused to a heterologous amino acid sequence;

(14) a device comprising a membrane suitable for implantation; and cells encapsulated within the membrane, where the cells secrete (I); and the membrane is permeable to the protein and impermeable to materials detrimental to the cells;

(15) a transgenic non-human mammal (VII) comprising (II);

(16) (II) attached to a solid support; and

(17) an array of nucleic acid molecules comprising (II).

ACTIVITY - Immunosuppressive; Cytostatic; Vulnerary; Antiulcer; Antiinfertility; Contraceptive.

MECHANISM OF ACTION - Gene therapy; Agonist or antagonist of TGF- beta -R polypeptide activity.

No biological data is given.

USE - (I) is useful for identifying a compound which binds to a TGF- beta -R polypeptide. The method further involves determining the activity of the polypeptide when bound to the compound. (II) is useful for modulating levels of a polypeptide in a animal. (V) is useful for treating, preventing, or ameliorating a TGF- beta -R polypeptide-related disease, condition or disorder. (IV) and (VII) are useful for determining whether a compound inhibits TGF- beta -R polypeptide or TGF- beta -R polypeptide production which involves exposing (IV) or (VII) to the compound and measuring TGF- beta -R polypeptide activity or production in a cell or mammal. (I) or (II) is useful for treating, preventing or ameliorating a medical condition. (I) or (II) is also useful for diagnosing a pathological condition which involves determining the presence or amount of expression of (I) or polypeptide encoded by (II) in a sample; and diagnosing a pathological condition, or susceptibility to pathological condition based on the presence or amount of expression of the polypeptide (all claimed).

TGF- beta -R nucleic acid molecules and polypeptides can be used to treat, diagnose, ameliorate or prevent degenerative disorders of the cartilage, bone, teeth, or other tissues (such as the kidney or liver), prevent organ rejection in transplantation, treat gastric or duodenal ulcers, promote wound healing, treat burns, promote tissue repair, suppress tumor growth or treat impaired fertility (alternatively, TGF- beta -R polypeptides, fragments, variants and/or derivatives may be used as contraceptives) may also be used as bone marrow protective agents, anti-inflammatory agents, mediators of cardioprotection or antagonists of TGF- beta -dependent tumors. TGF- beta -R nucleic acids may be used to map the locations of the TGF- beta -R gene and related genes on chromosomes and as hybridization probes. The TGF- beta -R polypeptides can be used to clone TGF- beta -R polypeptide

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receptors, using an expression cloning strategy. The human TGF- beta -R nucleic acids are also useful tools for isolating the corresponding chromosomal TGF- beta -R polypeptide genes. The human TGF- beta -R genomic DNA can be used to identify heritable tissue-degenerating diseases.

Dwg.0/6

L23 ANSWER 9 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-280755 [32] WPIDS
DOC. NO. CPI: C2002-082595
TITLE: Novel isolated leucine-rich repeat containing G protein coupled receptor 8 polypeptide, and polynucleotides encoding the polypeptide, useful for diagnosing and treating muscular dystrophy, female or male infertility.
DERWENT CLASS: B04 D16
INVENTOR(S): DAUGHERTY, B; GONG, J; PASZTY, C J; ROGERS, N
PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC
COUNTRY COUNT: 96
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|--|------|----------|-----------|-----|-----|
| WO 2002014489 | A2 | 20020221 | (200232)* | EN | 195 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2001083254 | A | 20020225 | (200245) | | |
| US 2002123618 | A1 | 20020905 | (200260) | | |
| EP 1309687 | A2 | 20030514 | (200333) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR | | | | | |
| JP 2004506425 | W | 20040304 | (200417) | 474 | |
| MX 2003001183 | A1 | 20030701 | (200420) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2002014489 | A2 | WO 2001-US25054 | 20010810 |
| AU 2001083254 | A | AU 2001-83254 | 20010810 |
| US 2002123618 | A1 Provisional | US 2000-224455P | 20000810 |
| | | US 2001-928175 | 20010810 |
| EP 1309687 | A2 | EP 2001-962040 | 20010810 |
| | | WO 2001-US25054 | 20010810 |
| JP 2004506425 | W | WO 2001-US25054 | 20010810 |
| | | JP 2002-519617 | 20010810 |
| MX 2003001183 | A1 | WO 2001-US25054 | 20010810 |
| | | MX 2003-1183 | 20030207 |

FILING DETAILS:

Searcher : Shears 571-272-2528

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001083254 | A Based on | WO 2002014489 |
| EP 1309687 | A2 Based on | WO 2002014489 |
| JP 2004506425 | W Based on | WO 2002014489 |
| MX 2003001183 | A1 Based on | WO 2002014489 |

PRIORITY APPLN. INFO: US 2000-224455P 20000810; US
2001-928175 20010810

AN 2002-280755 [32] WPIDS

AB WO 200214489 A UPAB: 20020521

NOVELTY - An isolated leucine-rich repeat-containing G protein coupled receptor 8 (LGR8) polypeptide (I) having a fully defined sequence (PS) of 754, 718, 383, 730, 694, 359, 682, 646, 311, 366, 330, 737, 718 or 380 (S1-S14) amino acids as given in specification, or fragment, ortholog, allelic or splice variant of PS, an amino acid sequence which is 70% identical to PS, or mutant of PS, is new.

DETAILED DESCRIPTION - (I) comprises an amino acid sequence:

(a) of PS, where (S1) is human LGR8A, (S3) is the N-terminal extracellular domain of human LGR8A, (S4) is human LGR8B, (S6) is N-terminal extracellular domain of human LGR8B, (S7) is human LGR8C, (S9) is N-terminal extracellular domain of human LGR8C, (S10) is human LGR8D, (S12) is murine LGR8A, (S14) is N-terminal extracellular domain of murine LGR8A;

(b) of (S2), (S5), (S8), (S11) or (S13), optionally further comprising an amino-terminal methionine;

(c) for ortholog of PS;

(d) which is at least 70% identical to PS, and which has an activity of PS;

(e) of allelic or splice variant of PS, or any of (b)-(d); or

(f) of PS with at least one conservative amino acid substitution, insertion, deletion, and/or C- and/or N-terminal truncation, where the polypeptide has an activity of PS.

(I) optionally comprises a fragment of PS comprising at least 25 amino acid residues, and having the activity of PS.

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid molecule (II) comprising a nucleotide sequence (a1) having a fully defined sequence (NS) of 2265, 1149, 2193, 1077, 2049, 933, 1101, 2214 or 1140 nucleotides (S15-S23) as given in specification; (b1) encoding PS; (c1) encoding polypeptide which is 70% identical to PS; (d1) encoding allelic or splice variant of NS or (c); (e1) of a region of NS, (c) or (d) encoding a polypeptide fragment comprising 25 amino acid residues of PS and is antigenic; (f1) of a region of nucleotide sequence of NS comprising a fragment of at least 16 nucleotides; (g1) encoding PS with at least one conservative amino acid substitution, insertion, deletion, and/or C- and/or N-terminal truncation, where the encoded peptide has activity of PS; (h1) of (g) comprising fragment of at least 16 nucleotides, (i) hybridizing under moderately or highly stringent conditions to the complement of any of (a1)-(h1), or nucleotide sequence complementary to any of the above mentioned sequences;

(2) a vector (III) comprising (II);

(3) a host cell (IV) comprising (III);

(4) preparation of (I);

(5) an isolated polypeptide (P) encoded by (II) having the

activity of PS;

(6) a selective binding agent (V) or its fragment that specifically binds to (I), or which comprises at least one complementarity determining region with specificity for a polypeptide having the amino acid sequence of PS. (V) is produced by immunizing an animal with a polypeptide comprising an amino acid sequence of PS;

(7) a hybridoma (VI) that produces (V);

(8) a composition (VII) comprising (I) and a formulation agent;

(9) a polypeptide (VIII) comprising a derivative of (I);

(10) a composition (IX) comprising (II) and a formulation agent;

(11) a viral vector comprising (II);

(12) a fusion polypeptide (X) comprising (I) fused to a heterologous amino acid sequence;

(13) a **device** comprising a membrane suitable for implantation; and cells encapsulated within the membrane, where the cells secrete (I); and the membrane is permeable to the protein and **impermeable** to materials detrimental to the cells;

(14) a transgenic non-human mammal (XI) comprising (II);

(15) an array of nucleic acid molecules comprising at least one (II); and

(16) an isolated polypeptide comprising the amino acid sequence of (S1) with at least one conservative amino acid substitution of isoleucine at position 26, 55, 216, 277, 324, 341, 344, 434, 466, 471, 522, 551, 597, 603, 621, 626, 654, 682, 702, 727; valine at position 41, 135, 204, 420, 425, 427, 531, 541, 552, 616, 675, or 729; aspartic acid at position 78, 123, 350, or 579; arginine at position 130, 444; methionine at position 142, 288, 737, or 745; leucine at position 166, 221, 240, 252, 376, 476, 649, or 749; tyrosine at position 167, 442, 450, 521, 526, 566, 577, 707, or 709; lysine at position 201, 290, or 632; glutamic acid at position 217, 481, 561, or 700; phenylalanine at position 478, 515, or 562; or histidine at position 485, where the polypeptide has an activity of (S1).

ACTIVITY - Immunomodulator; gynecological; cytostatic; antiinfertility; antianemic; hypotensive; vulnerary. No supporting data is given.

MECHANISM OF ACTION - Gene therapy.

USE - (I) or (P) is useful for treating, preventing or ameliorating a medical condition. (I) or (P) is also useful for diagnosing a pathological condition or a susceptibility to a pathological condition in a subject, where the diagnosis is based on the determination of presence or amount of expression of (I) or (P) in a sample. (I) is also useful for identifying a compound that binds to LGR8 polypeptide. (II) is useful for modulating levels of polypeptide in an animal. (IV) is useful for producing (I) by recombinant techniques. (IV) is useful for determining whether a compound inhibits LGR8 polypeptide activity or LGR8 polypeptide production, where the **cell** is exposed to the compound and LGR8 polypeptide activity or LGR8 polypeptide production in the **cell** is measured. (V) is useful for treating, preventing, or ameliorating an LGR8 polypeptide-related disease, condition, or disorder. (V) (anti-LGR8 antibody) is also useful for detecting or quantitating the amount of LGR8 polypeptide. (XI) is useful for determining whether a compound inhibits LGR8 polypeptide activity or

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LGR8 polypeptide production (all claimed). Nucleic acids encoding (I) are used as probes to identify **cells** associated with LGR8 polypeptide. LGR8 nucleic acid molecules, polypeptides, agonists and antagonists are useful for diagnosing and treating diseases and conditions affecting skeletal muscle such as cachexia and muscular dystrophy; disorders of the uterus e.g. endometriosis, uterine cancer; disorders of adrenal gland e.g. Cushing's disease ; disorders of testis e.g. testicular carcinoma; disorders of the bone marrow such as leukemia; disorders of kidney e.g. anemia, hypertension; ovarian cancer; diseases and conditions that modulate **cell** proliferation and differentiation such as tissue damage and degeneration, aging and wound healing. LGR8 molecules may be used for decreasing **cell** proliferation and differentiation e.g. in cancer. LGR8 nucleic acid molecules are useful for mapping locations of LGR8 genes and related genes and chromosomes, as probes, for **isolating** corresponding chromosomal LGR8 polypeptide genes and for identifying heritable tissue degenerating diseases.

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L23 ANSWER 10 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-257381 [30] WPIDS
DOC. NO. NON-CPI: N2002-199265
DOC. NO. CPI: C2002-076580
TITLE: Nucleic acid encoding a novel C3b/C4b Complement Receptor (CR)-like nucleic acid molecule, useful for treating, preventing and diagnosing rheumatoid arthritis, psoriatic arthritis, inflammatory arthritis, and multiple sclerosis.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): ELLIOTT, G S; WELCHER, A A; ELLIOT, G S
PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC; (ELLI-I) ELLIOTT G S; (WELC-I) WELCHER A A
COUNTRY COUNT: 97
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG | | | | | | | | | | | | | | | | |
|---------------|------|----------|-----------|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| WO 2002010388 | A2 | 20020207 | (200230)* | EN | 202 | | | | | | | | | | | | | | | | |
| RW: | AT | BE | CH | CY | DE | DK | EA | ES | FI | FR | GB | GH | GM | GR | IE | IT | KE | LS | LU | MC | |
| MW | MZ | NL | OA | PT | SD | SE | SL | SZ | TR | TZ | UG | ZW | | | | | | | | | |
| W: | AE | AG | AL | AM | AT | AU | AZ | BA | BB | BG | BR | BY | BZ | CA | CH | CN | CO | CR | CU | CZ | |
| DE | DK | DM | DZ | EC | EE | ES | FI | GB | GD | GE | GH | GM | HR | HU | ID | IL | IN | IS | JP | | |
| KE | KG | KP | KR | KZ | LC | LK | LR | LS | LT | LU | LV | MA | MD | MG | MK | MN | MW | MX | MZ | | |
| NO | NZ | PL | PT | RO | RU | SD | SE | SG | SI | SK | SL | TJ | TM | TR | TT | TZ | UA | UG | US | | |
| UZ | VN | YU | ZA | ZW | | | | | | | | | | | | | | | | | |
| AU 2001079024 | A | 20020213 | (200238) | | | | | | | | | | | | | | | | | | |
| US 2002151483 | A1 | 20021017 | (200270) | | | | | | | | | | | | | | | | | | |
| US 2002192758 | A1 | 20021219 | (200303) | | | | | | | | | | | | | | | | | | |
| EP 1307552 | A2 | 20030507 | (200332) | EN | | | | | | | | | | | | | | | | | |
| R: | AL | AT | BE | CH | CY | DE | DK | ES | FI | FR | GB | GR | IE | IT | LI | LT | LU | LV | MC | MK | |
| NL | PT | RO | SE | SI | TR | | | | | | | | | | | | | | | | |
| US 6656707 | B2 | 20031202 | (200379) | | | | | | | | | | | | | | | | | | |

APPLICATION DETAILS:

Searcher : Shears 571-272-2528

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2002010388 | A2 | WO 2001-US23548 | 20010724 |
| AU 2001079024 | A | AU 2001-79024 | 20010724 |
| US 2002151483 | A1 Provisional | US 2000-222438P | 20000801 |
| | | US 2001-911842 | 20010724 |
| US 2002192758 | A1 Provisional | US 2000-222438P | 20000801 |
| | Div ex | US 2001-911842 | 20010724 |
| | | US 2002-150821 | 20020516 |
| EP 1307552 | A2 | EP 2001-957263 | 20010724 |
| | | WO 2001-US23548 | 20010724 |
| US 6656707 | B2 Provisional | US 2000-222438P | 20000801 |
| | | US 2001-911842 | 20010724 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001079024 | A Based on | WO 2002010388 |
| EP 1307552 | A2 Based on | WO 2002010388 |

PRIORITY APPLN. INFO: US 2000-222438P 20000801; US
2001-911842 20010724; US
2002-150821 20020516

AN 2002-257381 [30] WPIDS

AB WO 200210388 A UPAB: 20020513

NOVELTY - A nucleic acid encoding a novel C3b/C4b Complement Receptor (CR)-like nucleic acid molecule, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid (N1) comprising a nucleotide sequence selected from:

(a) the 10878 (I) or 11230 (II) nucleotide sequence defined in the specification;

(b) a nucleotide sequence encoding the 3571 (III) or 3594 (IV) amino acid sequence defined in the specification;

(c) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (a) or (b), where the encoded polypeptide has the activity of (III) or (IV);

(d) a nucleotide sequence complementary to any of (a)-(c);

(e) a nucleotide sequence encoding a polypeptide that is at least 70-99 percent identical to (I) or (II), where the polypeptide has the activity of (III) or (IV);

(f) a nucleotide sequence encoding an allelic variant or splice variant of (I) or (II), where the encoded polypeptide has the activity of (III) or (IV);

(g) a nucleotide sequence of (I) or (II), or the nucleic acid of (e) or (f) encoding a polypeptide fragment of at least 25 amino acid residues, where the polypeptide has the activity of (III) or (IV);

(h) a nucleotide sequence of (I) or (II), or the nucleic acid of (e), (f) or (g) comprises a fragment of at least 16 nucleotides;

(i) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (e)-(h), where the polypeptide has the activity of (III) or (IV);

(j) a nucleotide sequence complementary to any of (e)-(g);

(k) a nucleotide sequence encoding (I) or (II) with at least one conservative amino acid substitution, insertion, deletion, or a C- and/or N- terminal truncation, where the polypeptide has the activity of (I) or (II);

(l) a nucleotide sequence of (k) comprising a fragment of at least about 16 nucleotides;

(m) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (k)-(l), where the polypeptide has the activity of (III) or (IV); or

(n) a nucleotide sequence complementary to (k);

(2) a vector comprising N1;

(3) a host cell comprising the vector of (2);

(4) a method (M1) of producing a C3b/C4b CR-like polypeptide comprising culturing the host cell of (3);

(5) a polypeptide produced by M1;

(6) a process for identifying candidate inhibitors or stimulators of C3b/C4b CR-like polypeptide activity or production;

(7) an isolated polypeptide (P1) comprising the amino acid sequence of (III) or (IV);

(8) an isolated polypeptide (P2) comprising the amino acid sequence selected from:

(a) the mature amino acid sequence of (III) or (IV), optionally further comprising an amino-terminal methionine;

(b) an amino acid sequence for an ortholog of (III) or (IV), where the encoded polypeptide has an activity of (III) or (IV);

(c) an amino acid sequence that is at least 70-99 percent identical to the amino acid sequence of (III) or (IV), where the polypeptide has an activity of (III) or (IV);

(d) a fragment of (III) or (IV) comprising at least 25 amino acid residues, where the polypeptide has an activity of (III) or (IV);

(e) an amino acid sequence for an allelic variant or splice variant of either (III) or (IV), or at least one of (a)-(c) where the polypeptide has an activity of (III) or (IV); or

(f) the amino acid sequence of (III) or (IV) with at least one conservative amino acid substitution, insertion, deletion, or a C- and/or N-terminal truncation, where the polypeptide has an activity of (III) or (IV);

(9) an isolated polypeptide encoded by N1;

(10) an antibody produced by immunizing an animal with a peptide comprising the sequence of (III) or (IV);

(11) a monoclonal antibody or its fragment that specifically binds P1 or P2;

(12) a hybridoma that produces a monoclonal antibody that binds to a peptide comprising the sequence of (III) or (IV);

(13) a method of detecting or quantitating the amount of C3b/C4b CR-like polypeptide in a sample using the antibody of (10) or (11);

(14) a selective binding agent (A1) or its fragment that specifically binds at least one polypeptide;

(15) a selective binding agent (A2) or its fragment comprising at least one complementarity determining region (CDR) with specificity for (III) or (IV);

(16) a method for treating, preventing, or ameliorating a disease, condition, or disorder, comprising administering to an effective amount of A1, P1, P2 or the polypeptide encoded by N1 to

the mammal;

(17) a selective binding agent produced by immunizing an animal with a polypeptide comprising (III) or (IV);

(18) a hybridoma that produces a selective binding agent capable of binding P1 or P2;

(19) a polypeptide (P3) comprising a derivative of P1 or P2;

(20) a viral vector comprising N1;

(21) a fusion polypeptide (P4) comprising P1 or P2 fused to a heterologous amino acid sequence;

(22) a method (M2) of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject;

(23) a device, comprising cells that secrete P1 or P2;

(24) a method of identifying (M3) a compound which binds to a polypeptide;

(25) a method of modulating levels of a polypeptide in an animal, comprising administering N1 to the animal; and

(26) a transgenic non-human mammal comprising N1.

ACTIVITY - Immunomodulatory; antirheumatic; antiarthritic; antipsoriatic; antiinflammatory; antidiabetic; nootropic; neuroprotective; vasodilator; antiarteriosclerotic; cardiant; antidiabetic; anorectic; infertility.

MECHANISM OF ACTION - C3b/C4b CR-like polypeptide modulator; gene therapy.

No biological data given.

USE - The C3b/C4b CR-like polypeptide and nucleic acid molecules may be used to treat, prevent, ameliorate, diagnose and/or detect diseases such as immune system disorders such as rheumatoid arthritis, psoriatic arthritis, inflammatory arthritis, osteoarthritis, inflammatory joint disease, autoimmune disease, multiple sclerosis, lupus, diabetes, inflammatory bowel disease, transplant rejection, graft versus host disease, nervous system disorders (e.g. stroke, Alzheimer's disease), ischemic conditions (e.g. atherosclerosis, restenosis, myocardial infarction, and ischemia), metabolic disorders (e.g. obesity and diabetes); and reproductive disorders, and infertility.

Dwg.0/3

L23 ANSWER 11 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-303934 [34] WPIDS
 DOC. NO. CPI: C2002-088349
 TITLE: Nucleic acid encoding a novel C3b/C4b Complement Receptor-like nucleic acid molecule, useful for treating, preventing and diagnosing rheumatoid arthritis, psoriatic arthritis, inflammatory arthritis, and multiple sclerosis.
 DERWENT CLASS: A96 B04 D16
 INVENTOR(S): ELLIOTT, G S; WELCHER, A A
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC
 COUNTRY COUNT: 97
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 2002010199 | A2 | 20020207 | (200234)* | EN | 285 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |

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W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US
UZ VN YU ZA ZW
AU 2001080733 A 20020213 (200238)
EP 1307554 A2 20030507 (200332) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK
NL PT RO SE SI TR
JP 2004504831 W 20040219 (200414) 330

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|-----------------|----------|
| WO 2002010199 | A2 | WO 2001-US23232 | 20010724 |
| AU 2001080733 | A | AU 2001-80733 | 20010724 |
| EP 1307554 | A2 | EP 2001-959147 | 20010724 |
| | | WO 2001-US23232 | 20010724 |
| JP 2004504831 | W | WO 2001-US23232 | 20010724 |
| | | JP 2002-515928 | 20010724 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001080733 | A Based on | WO 2002010199 |
| EP 1307554 | A2 Based on | WO 2002010199 |
| JP 2004504831 | W Based on | WO 2002010199 |

PRIORITY APPLN. INFO: US 2000-728787 20001128; US
2000-222504P 20000802

AN 2002-303934 [34] WPIDS

AB WO 200210199 A UPAB: 20020528

NOVELTY - A nucleic acid encoding a novel C3b/C4b Complement
Receptor (CR)-like nucleic acid molecule, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for
the following:

(1) a nucleic acid (N1) comprising a nucleotide sequence
selected from:

(a) the 10673 (S1), 12525 (S2) or 10433 (S3) nucleotide
sequence defined in the specification;

(b) a nucleotide sequence encoding the 3069 (S4), 3095 (S5) or
3100 (S6) amino acid sequence defined in the specification;

(c) a nucleotide sequence which hybridizes under moderately or
highly stringent conditions to the complement of (a) or (b), where
the encoded polypeptide has the activity of (S4), (S5) or (S6);

(d) a nucleotide sequence complementary to any of (a)-(c);

(e) a nucleotide sequence encoding a polypeptide that is at
least 70-99 percent identical to (S1), (S2) or (S3), where the
polypeptide has the activity of (S4), (S5) or (S6);

(f) a nucleotide sequence encoding an allelic variant or splice
variant of (S1), (S2) or (S3), where the encoded polypeptide has the
activity of (S4), (S5) or (S6);

(g) a nucleotide sequence of (S1), (S2) or (S3), or the nucleic
acid of (e) or (f) encoding a polypeptide fragment of at least 25

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amino acid residues, where the polypeptide has the activity of (S4), (S5) or (S6);

(h) a nucleotide sequence of (S1), (S2) or (S3), or the nucleic acid of (e), (f) or (g) comprises a fragment of at least 16 nucleotides;

(i) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (e)-(h), where the polypeptide has the activity of (S4), (S5) or (S6);

(j) a nucleotide sequence complementary to any of (e)-(g);

(k) a nucleotide sequence encoding (S1), (S2) or (S3) with at least one conservative amino acid substitution, insertion, deletion, or a C- and/or N- terminal truncation, where the polypeptide has the activity of (S1), (S2) or (S3);

(l) a nucleotide sequence of (k) comprising a fragment of at least about 16 nucleotides;

(m) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (k)-(l), where the polypeptide has the activity of (S4), (S5) or (S6); or

(n) a nucleotide sequence complementary to (k);

(2) a vector comprising N1;

(3) a host cell comprising the vector of (2);

(4) a method (M1) of producing a C3b/C4b CR-like polypeptide comprising culturing the host cell of (3);

(5) a polypeptide produced by M1;

(6) a process for identifying candidate inhibitors or stimulators of C3b/C4b CR-like polypeptide activity or production;

(7) an isolated polypeptide (P1) comprising the amino acid sequence of (S4), (S5) or (S6);

(8) an isolated polypeptide (P2) comprising the amino acid sequence selected from:

(a) the mature amino acid sequence of (S4), (S5) or (S6), optionally further comprising an amino-terminal methionine;

(b) an amino acid sequence for an ortholog of (S4), (S5) or (S6), where the encoded polypeptide has an activity of (S4), (S5) or (S6);

(c) an amino acid sequence that is at least 70-99 percent identical to the amino acid sequence of (S4), (S5) or (S6), where the polypeptide has an activity of (S4), (S5) or (S6);

(d) a fragment of (S4), (S5) or (S6) comprising at least 25 amino acid residues, where the polypeptide has an activity of (S4), (S5) or (S6);

(e) an amino acid sequence for an allelic variant or splice variant of either (S4), (S5) or (S6), or at least one of (a)-(c) where the polypeptide has an activity of (S4), (S5) or (S6); or

(f) the amino acid sequence of (S4), (S5) or (S6) with at least one conservative amino acid substitution, insertion, deletion, or a C- and/or N-terminal truncation, where the polypeptide has an activity of (S4), (S5) or (S6);

(9) an isolated polypeptide encoded by N1;

(10) an antibody produced by immunizing an animal with a peptide comprising the sequence of (S4), (S5) or (S6);

(11) a monoclonal antibody or its fragment that specifically binds P1 or P2;

(12) a hybridoma that produces a monoclonal antibody that binds to a peptide comprising the sequence of (S4), (S5) or (S6);

(13) a method of detecting or quantitating the amount of

C3b/C4b CR-like polypeptide in a sample using the antibody of (10) or (11);

(14) a selective binding agent (A1) or its fragment that specifically binds at least one polypeptide;

(15) a selective binding agent (A2) or its fragment comprising at least one complementarity determining region (CDR) with specificity for (S4), (S5) or (S6);

(16) a method for treating, preventing, or ameliorating a disease, condition, or disorder, comprising administering to an effective amount of A1, P1, P2 or the polypeptide encoded by N1 to the mammal;

(17) a selective binding agent produced by immunizing an animal with a polypeptide comprising (S4), (S5) or (S6);

(18) a hybridoma that produces a selective binding agent capable of binding P1 or P2;

(19) a polypeptide (P3) comprising a derivative of P1 or P2;

(20) a viral vector comprising N1;

(21) a fusion polypeptide (P4) comprising P1 or P2 fused to a heterologous amino acid sequence;

(22) a method (M2) of diagnosing a pathological condition or a susceptibility to a pathological;

(23) a device, comprising cells that secrete P1 or P2;

(24) a method of identifying (M3) a compound which binds to a polypeptide;

(25) a method of modulating levels of a polypeptide in an animal, comprising administering N1 to the animal; and

(26) a transgenic non-human mammal comprising N1.

ACTIVITY - Immunomodulatory; antirheumatic; antiarthritic; antipsoriatic; antiinflammatory; antidiabetic; nootropic; neuroprotective; vasodilator; cardiant; antidiabetic; anorectic; infertility.

MECHANISM OF ACTION - C3b/C4b CR-like polypeptide modulator; gene therapy.

No biological data given.

USE - The C3b/C4b CR-like polypeptide and nucleic acid molecules may be used to treat, prevent, ameliorate, diagnose and/or detect diseases such as immune system disorders such as rheumatoid arthritis, psoriatic arthritis, inflammatory arthritis, osteoarthritis, inflammatory joint disease, autoimmune disease, multiple sclerosis, lupus, inflammatory bowel disease, transplant rejection, nervous system disorders (e.g. Alzheimer's disease), ischemic conditions, metabolic disorders (e.g. obesity and diabetes) and infertility.

Dwg.0/4

L23 ANSWER 12 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-171639 [22] WPIDS
 DOC. NO. CPI: C2002-053078
 TITLE: Novel B7-like polypeptides, polynucleotides and their modulators useful for prevention and treatment of reproductive, immune and proliferative disorders, e.g. cancer, arteriosclerosis.
 DERWENT CLASS: B04
 INVENTOR(S): FANG, M; FOX, G M; SULLIVAN, J K; FOX, M
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC
 COUNTRY COUNT: 96

10/602785

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|--|------|----------|-----------|----|-----|
| WO 2002002624 | A2 | 20020110 | (200222)* | EN | 133 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2001073194 | A | 20020114 | (200237) | | |
| US 2002165347 | A1 | 20021107 | (200275) | | |
| EP 1294885 | A2 | 20030326 | (200323) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR | | | | | |
| JP 2004502417 | W | 20040129 | (200413) | | 215 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2002002624 | A2 | WO 2001-US21297 | 20010629 |
| AU 2001073194 | A | AU 2001-73194 | 20010629 |
| US 2002165347 | A1 Provisional | US 2000-215645P | 20000630 |
| | | US 2001-896738 | 20010629 |
| EP 1294885 | A2 | EP 2001-952443 | 20010629 |
| | | WO 2001-US21297 | 20010629 |
| JP 2004502417 | W | WO 2001-US21297 | 20010629 |
| | | JP 2002-507875 | 20010629 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001073194 | A Based on | WO 2002002624 |
| EP 1294885 | A2 Based on | WO 2002002624 |
| JP 2004502417 | W Based on | WO 2002002624 |

PRIORITY APPLN. INFO: US 2000-215645P 20000630; US
2001-896738 20010629

AN 2002-171639 [22] WPIDS

AB WO 200202624 A UPAB: 20020409

NOVELTY - An isolated B7-like (B7-L) polypeptide (I) comprising a sequence (S1) of 282 amino acids defined in the specification, its ortholog, 70% identical sequence, allelic or splice variant, a polypeptide with a modification, or a fragment of (S1) comprising 25 amino acid residues which has the activity of (I) or its antigenic fragment, is new.

DETAILED DESCRIPTION - An isolated B7-like (B7-L) polypeptide (I) comprising a sequence (S1) of 282 amino acids defined in the specification, its ortholog, 70% identical sequence, allelic or splice variant, a polypeptide with a modification, or a fragment of (S1) comprising 25 amino acid residues which has the activity of (I) or its antigenic fragment, is new. (I) Is chosen from a polypeptide

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comprising (S1) or its ortholog, a polypeptide comprising 70% identical sequence to (S1) and having the activity of B7-L polypeptide; allelic or splice variant of (I), a polypeptide with a modification including conservative amino acid substitution, insertion, deletion, C- and/or N-terminal truncation having the activity of (I), a fragment of (S1) comprising 25 amino acid residues which has the activity of (I), or its antigenic fragment and the mature B7-L polypeptide comprising the sequence of 258 amino acids, optionally further comprising an amino-terminal methionine.

INDEPENDENT CLAIMS are included for:

- (1) an isolated nucleic acid molecule (II) encoding (I), comprising a nucleotide sequence (S2) of 2603 bp defined in the specification, complement of (II), a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (II), a region of (S2) comprising a fragment of 16 nucleotides, or a region of (S2) encoding a fragment of B7-L polypeptide;
- (2) a vector (III) comprising (II);
- (3) a host cell (IV) comprising (III);
- (4) preparation of (I);
- (5) a polypeptide produced by the above method;
- (6) an isolated polypeptide encoded by (II), which has the activity of (I);
- (7) a selective binding agent (V) or its fragment that specifically binds to (I);
- (8) a selective binding agent or its fragment comprising at least one complementarity determining region with specificity for (I), or which is produced by immunizing an animal with (I);
- (9) a hybridoma that produces (V);
- (10) a polypeptide (VI) comprising a derivative of (I);
- (11) a pharmaceutical composition (VII) comprising (I) or (II);
- (12) a viral vector comprising (II);
- (13) a fusion polypeptide (VIII) comprising (I) fused to heterologous amino acid sequence;
- (14) a **device** comprising a membrane suitable for implantation, permeable to (I) and **impermeable** to materials detrimental to the cells, and cells encapsulated within the membrane, where the cells secrete (I);
- (15) a transgenic non-human mammal (IX) comprising (II);
- (16) a nucleic acid molecule, which is (II) attached to a solid support; and
- (17) an array of nucleic acid molecules comprising (II).

ACTIVITY - Antiinfertility; Gynecological; Cytostatic; Immunosuppressive; Antiarthritic; Antirheumatic; Antiinflammatory; Dermatological; Antipsoriatic; Neuroprotective; Antidiabetic; Hemostatic; Antithyroid; Antiulcer; Antiallergic; Antiasthmatic; Nephrotropic; Virucide.

MECHANISM OF ACTION - Gene therapy.

No biological data given.

USE - (I) Is useful for treating, preventing or ameliorating a medical condition, for diagnosing a pathological condition or a susceptibility to a pathological condition, and for identifying a compound that binds to (I). (II) Is useful for modulating levels of a polypeptide in an animal. (IV) And (IX) are useful for determining whether a compound inhibits B7-L polypeptide activity or B7-L polypeptide production. (V) Is useful for treating, preventing or

ameliorating a B7-like polypeptide-related disease, condition or disorder, and for detecting or quantitating the amount of (I) (all claimed). (I), (II) And modulators of (II) are useful for treating B7-like polypeptide-related disease, disorders or conditions including reproductive disorders (e.g. infertility, miscarriage, preterm labor and delivery and endometriosis) and proliferative disorders. Antibodies, soluble proteins comprising extracellular domains and other regulators of (I) are useful for enhancing the immune response to tumors. (I) Plays a role in growth and maintenance of cancer **cells** based on the observation of seminal vesicle hyperplasia in transgenic mice overexpressing (I). Hence modulators of (I) are useful for the treatment of cancer e.g. seminal vesicle, lung, brain, breast, ovarian, testicular cancer and cancers of hematopoietic system. (I), (II) And their modulators are useful to treat autoimmune diseases such as systemic lupus erythematosus, rheumatoid arthritis, diabetes, immune thrombocytopenic purpura and psoriasis, chronic inflammatory disease such as inflammatory bowel disease (Crohn's disease and ulcerative colitis), Grave's disease, Hashimoto's thyroiditis and diabetes mellitus. They are also useful as immunosuppressive agents for bone marrow and organ transplantation or to prolong graft survival. Modulators of (I) are also useful for diagnosis and treatment of diseases involving abnormal **cell** proliferation, including arteriosclerosis and vascular restenosis. Enhancement of cellular immune functions by B7-L polypeptides or B7-L polypeptides/Fc fusions is beneficial in eliminating virus-infected **cells**. Soluble (I) serves as vaccine adjuvants. Antagonists of (I) are useful for alleviation of toxic shock syndrome or allosensitization due to blood transfusions, and for treatment of autoimmune disorders e.g. multiple sclerosis, allergy, asthma and hypersensitivity reactions, nephropathies (e.g. glomerulonephritis), skin disorders (pemphigus and pemphigoid), endocrinopathies (Grave's disease), various pneumopathies (extrinsic alveolitis), vasculopathies, coeliac disease, anemias, thrombocytopenias, Guillain-Barre syndrome and myasthenia gravis, and lymphoproliferative disorders such as multiple myeloma. (I) Is also useful as an immunogen for producing antibodies, and to clone B7-L polypeptide receptors. (II) is useful to map the locations of B7-L gene and related genes on chromosomes, as hybridization probes in diagnostic assays, for **isolating** corresponding chromosomal B7-L polypeptide genes, and to identify heritable tissue-degenerating diseases. (II) Is also useful for constructing knock-out mice. The selective binding agents, including antiB7-L antibodies are useful for in vivo imaging.

Dwg.0/3

L23 ANSWER 13 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-130881 [17] WPIDS
 DOC. NO. CPI: C2002-040259
 TITLE: New B7-like polypeptides, polynucleotides and their modulators, useful for diagnosing, preventing and treating reproductive, immune and proliferative disorders, e.g. cancer and arteriosclerosis.
 DERWENT CLASS: B04 D16
 INVENTOR(S): CHUTE, H T; SARMIENTO, U M; SCHULTZ, H J; WELCHER, A A
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC

10/602785

COUNTRY COUNT: 96
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|--|------|----------|-----------|----|-----|
| WO 2002000710 | A2 | 20020103 | (200217)* | EN | 135 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2001071618 | A | 20020108 | (200235) | | |
| EP 1294882 | A2 | 20030326 | (200323) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR | | | | | |
| JP 2004501625 | W | 20040122 | (200411) | | 210 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|-----------------|----------|
| WO 2002000710 | A2 | WO 2001-US20719 | 20010628 |
| AU 2001071618 | A | AU 2001-71618 | 20010628 |
| EP 1294882 | A2 | EP 2001-950650 | 20010628 |
| | | WO 2001-US20719 | 20010628 |
| JP 2004501625 | W | WO 2001-US20719 | 20010628 |
| | | JP 2002-505832 | 20010628 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001071618 | A Based on | WO 2002000710 |
| EP 1294882 | A2 Based on | WO 2002000710 |
| JP 2004501625 | W Based on | WO 2002000710 |

PRIORITY APPLN. INFO: US 2000-729264 20001128; US
2000-214512P 20000628

AN 2002-130881 [17] WPIDS

AB WO 200200710 A UPAB: 20020313

NOVELTY - An isolated B7-like (B7-L) polypeptide (I) comprising a sequence (S1) of 382, 386, 377, 370, 270 or 223 amino acids defined in the specification, its ortholog, 70% identical sequence, allelic or splice variant, a polypeptide with a modification, or a fragment of (S1) comprising 25 amino acid residues which has the activity of (I) or its antigenic fragment, is new.

DETAILED DESCRIPTION - (I) is chosen from a polypeptide comprising (S1), its ortholog, 70% identical sequence, allelic or splice variant, a polypeptide with a modification including conservative amino acid substitution, insertion, deletion, C- and/or N-terminal truncation having the activity of (I), and a fragment of (S1) comprising 25 amino acid residues which has the activity of (I) or its antigenic fragment.

INDEPENDENT CLAIMS are also included for the following:

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- (1) an isolated nucleic acid molecule (II) encoding (I), comprising a nucleotide sequence (S2) of 1175, 1168, 1240, 1139, 1195, 895 or 754 base pairs (bp) defined in the specification, a complement of (II), a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (II), or a region of (S2) comprising a fragment of 16 nucleotides;
- (2) a vector (III) comprising (II);
- (3) a host cell (IV) comprising (III);
- (4) producing (I);
- (5) a polypeptide produced by the above method;
- (6) an isolated polypeptide encoded by (II), which has the activity of (I);
- (7) a selective binding agent (V) or its fragment that specifically binds to (I);
- (8) a selective binding agent or its fragment comprising at least one complementarity determining region (CDR) with specificity for (I), or which is produced by immunizing an animal with (I);
- (9) a hybridoma that produces (V);
- (10) a polypeptide (VI) comprising a derivative of (I);
- (11) a pharmaceutical composition (VII) comprising (I), (II) and a pharmaceutically acceptable formulation agent;
- (12) a viral vector comprising (II);
- (13) a fusion polypeptide (VIII) comprising (I) fused to heterologous amino acid sequence;
- (14) a **device** comprising a membrane suitable for implantation, permeable to (I) and **impermeable** to materials detrimental to the cells, and cells encapsulated within the membrane, where the cells secrete (I);
- (15) a transgenic non-human mammal (IX) comprising (II);
- (16) a nucleic acid molecule which is (II) attached to a solid support; and
- (17) an array of nucleic acid molecules comprising (II).

ACTIVITY - Antiinfertility; Gynecological; Antitumor; Cytostatic; Immunosuppressive; Antiarthritic; Antirheumatic; Antiinflammatory; Dermatological; Antipsoriatic; Neuroprotective; Antidiabetic; Hemostatic; Antithyroid; Antiulcer; Antiallergic; Antiasthmatic; Nephrotropic; Antibacterial; Virucide.

MECHANISM OF ACTION - Gene therapy; Antagonist of (I). No supporting data is given.

USE - (I) is useful for treating, preventing or ameliorating a medical condition, for diagnosing a pathological condition or a susceptibility to a pathological condition, and for identifying a compound that binds to (I), by determining the extend of binding of B7-L polypeptide to the compound and determining activity of the polypeptide when bound to the compound. (II) is useful for modulating levels of a polypeptide in an animal. (IV) and (IX) are useful for determining whether a compound inhibits B7-L polypeptide activity or B7-L polypeptide production. (V) is useful for treating, preventing or ameliorating a B7-like polypeptide-related disease, condition or disorder, and for detecting or quantitating the amount of (I) (all claimed). (I), (II) and modulators of (II) are useful for treating B7-like polypeptide-related disease, disorders or conditions including reproductive disorders (e.g. infertility, miscarriage, preterm labor and delivery and endometriosis) and proliferative disorders. Antibodies, soluble proteins comprising extracellular domains and other regulators of B7-L polypeptides are

useful for enhancing the immune response to tumors. (I) plays a role in growth and maintenance of cancer **cells** based on the observation of seminal vesicle hyperplasia in transgenic mice overexpressing B7-L polypeptide. Hence modulators of (I) are useful for the treatment of cancer including seminal vesicle cancer, lung, brain, breast, ovarian, testicular cancer and cancers of hematopoietic system. B7-L polypeptide pathway can be manipulated to regulate cytotoxic T-lymphocyte response in allograft transplantation, graft versus host disease, T-**cell** dependent B-**cell** mediated diseases and autoimmune diseases. B7-L molecules are useful for alleviating the symptoms associated with diseases involving chronic immune **cell** dysfunction or to treat autoimmune diseases such as systemic lupus erythematosus, rheumatoid arthritis, multiple sclerosis, diabetes, immune thrombocytopenic purpura and psoriasis, chronic inflammatory disease such as inflammatory bowel disease (Crohn's disease and ulcerative colitis), Grave's disease, Hashimoto's thyroiditis and diabetes mellitus. They are also useful as immunosuppressive agents for bone marrow and organ transplantation or to prolong graft survival. B7-L molecules are also useful for diagnosis and treatment of diseases involving abnormal **cell** proliferation, including arteriosclerosis and vascular restenosis. Enhancement of cellular immune functions by B7-L polypeptides or B7-L polypeptides/Fc fusions is beneficial in eliminating virus-infected **cells**. Soluble B7-L polypeptides serve as vaccine adjuvants. (I) is also useful as an immunogen for producing antibodies, and to clone B7-L polypeptide receptors. Antagonists of B7-L polypeptides are useful for alleviation of toxic shock syndrome or allosensitization due to blood transfusions, and for treatment of allergy, asthma and hypersensitivity reactions, nephropathies (e.g. glomerulonephritis), skin disorders (pemphigus and pemphigoid), endocrinopathies (Grave's disease), various pneumopathies (extrinsic alveolitis), vasculopathies, coeliac disease, anemia, thrombocytopenias, Guillain-Barre syndrome and myasthenia gravis, and lymphoproliferative disorders such as multiple myeloma. (II) is useful to map the locations of B7-L gene and related genes on chromosomes, as hybridization probes in diagnostic assays, for **isolating** corresponding chromosomal B7-L polypeptide genes, and to identify heritable tissue-degenerating diseases. The selective binding agents, including antiB7-L antibodies are useful for in vivo imaging.

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|---------------------|--|-------|---------------------------------------|
| L23 | ANSWER 14 OF 30 | WPIDS | COPYRIGHT 2004 THOMSON DERWENT on STN |
| ACCESSION NUMBER: | 2003-147394 [14] | WPIDS | |
| DOC. NO. CPI: | C2003-037964 | | |
| TITLE: | Novel ATP-binding cassette transporter-like polypeptides and polynucleotides useful for diagnosing, preventing, treating disorders involving immune, nervous system, thyroid, hypothalamus and impaired transport of lipids. | | |
| DERWENT CLASS: | A96 B04 D16 | | |
| INVENTOR(S): | SHUTTER, J; ULIAS, L | | |
| PATENT ASSIGNEE(S): | (SHUT-I) SHUTTER J; (ULIA-I) ULIAS L; (AMGE-N) AMGEN INC | | |
| COUNTRY COUNT: | 98 | | |

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| US 2002127647 | A1 | 20020912 | (200314)* | | 149 |
| WO 2002099108 | A2 | 20021212 | (200314) | EN | |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ | | | | | |
| DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP | | | | | |
| KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ | | | | | |
| NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US | | | | | |
| UZ VN YU ZA ZW | | | | | |
| EP 1354039 | A2 | 20031022 | (200370) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK | | | | | |
| NL PT RO SE SI TR | | | | | |
| JP 2004520083 | W | 20040708 | (200445) | | 321 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|-----------------|----------|
| US 2002127647 | A1 | Provisional | |
| | | US 2000-253520P | 20001128 |
| | | US 2001-995542 | 20011128 |
| WO 2002099108 | A2 | WO 2001-US44274 | 20011128 |
| EP 1354039 | A2 | EP 2001-274076 | 20011128 |
| | | WO 2001-US44274 | 20011128 |
| JP 2004520083 | W | WO 2001-US44274 | 20011128 |
| | | JP 2003-502217 | 20011128 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| EP 1354039 | A2 Based on | WO 2002099108 |
| JP 2004520083 | W Based on | WO 2002099108 |

PRIORITY APPLN. INFO: US 2000-253520P 20001128; US
2001-995542 20011128

AN 2003-147394 [14] WPIDS

AB US2002127647 A UPAB: 20030227

NOVELTY - An isolated murine and human ATP-binding cassette transporter-like (ABCL) polypeptide (I) comprising a sequence (S1) of 2167, 2146 or 1550 amino acids defined in the specification, or the amino acid sequence encoded by the DNA insert in ATCC Deposit Nos PTA-3109, PTA-3110 or PTA-3111, is new.

DETAILED DESCRIPTION - An isolated murine and human ATP-binding cassette transporter-like (ABCL) polypeptide (I) comprises a sequence (S1) of 2167, 2146 or 1550 amino acids defined in the specification, or the amino acid sequence encoded by the DNA insert in ATCC Deposit Nos PTA-3109, PTA-3110 or PTA-3111.

(I) is chosen from:

(a) the amino acid sequence of mature ABCL polypeptide having 2121 or 2100 amino acids given in the specification, optionally further comprising an amino-terminal methionine;

(b) an amino acid sequence S1 encoded by the DNA insert in ATCC

Deposit Nos PTA-3109, PTA-3110 or PTA-3111;

- (c) an amino acid sequence for an ortholog of (S1);
- (d) a fragment of (S1) comprising at least 25 amino acid residues which has the activity of (I) or is antigenic;
- (e) an amino acid sequence that is at least 70% identical to (S1), where the polypeptide has the activity of (I);
- (f) an amino acid sequence for an allelic variant or splice variant of (I); and
- (g) the amino acid sequence of (I) with a modification including conservative amino acid substitution, insertion, deletion, C- and/or N-terminal truncation and having the activity of (I).

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated nucleic acid molecule (II) encoding (I), comprising a nucleotide sequence (S2) of 6633, 6804 or 4653 bp defined in the specification, the nucleotide sequence of the DNA insert in ATCC Deposit Number PTA-3109, PTA-3110 or PTA-3111, complement of (II), a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (II), or a region of (S2) comprising a fragment of 16 nucleotides;
- (2) a vector (III) comprising (II);
- (3) a host cell (IV) comprising (III);
- (4) producing (I);
- (5) a polypeptide produced by the above method;
- (6) an isolated polypeptide encoded by (II), which has the activity of (I);
- (7) a selective binding agent (V) or its fragment that specifically binds to (I);
- (8) a selective binding agent or its fragment comprising at least one complementarity determining region with specificity for (I), or which is produced by immunizing an animal with (I);
- (9) a hybridoma that produces (V);
- (10) a polypeptide (VI) comprising a derivative of (I);
- (11) a pharmaceutical composition (VII) comprising (I), (II) and a pharmaceutically acceptable formulation agent;
- (12) a viral vector comprising (II);
- (13) a fusion polypeptide (VIII) comprising (I) fused to heterologous amino acid sequence;
- (14) a **device** comprising a membrane suitable for implantation, permeable to the protein and **impermeable** to materials detrimental to the cells, and cells encapsulated within the membrane, where the cells secrete (I);
- (15) a transgenic non-human mammal (IX) comprising (II);
- (16) a nucleic acid molecule which is (II) attached to a solid support;
- (17) an array of nucleic acid molecules comprising (II); and
- (18) a kit for detecting or quantitating the amount of ABCL polypeptide in a biological sample, comprising (V).

ACTIVITY - Antiatherosclerotic; Antilipemic; Antiinflammatory; Antianemic; Immunosuppressive; Antithyroid; Anorectic; Antidiabetic; Neuroprotective; Anti-HIV; Cytostatic; Immunostimulant.

MECHANISM OF ACTION - Gene therapy; Modulator of (I).

No biological data is given.

USE - (I) or polypeptide encoded by (II) is useful for treating, preventing or ameliorating a medical condition, for diagnosing a pathological condition or a susceptibility to a pathological condition, and for identifying a compound that binds to

(I), by determining the extend of binding of ABCL polypeptide to the compound and determining activity of the polypeptide when bound to the compound.

(II) is useful for modulating levels of ABCL polypeptide in an animal. (IV) and (IX) are useful for determining whether a compound inhibits ABCL polypeptide activity or ABCL polypeptide production. (V) is useful for treating, preventing or ameliorating an ABCL polypeptide-related disease, condition or disorder, and for detecting or quantitating the amount of (I) (all claimed).

ABCL polypeptide, nucleic acids and modulators are useful for the diagnosis and/or treatment of diseases and conditions involving impaired transport of lipids, including cardiovascular disease, hypertriglyceridemia, atherosclerosis, hypercholesterolemia, Tangier disease and other dyslipidemias; conditions involving functional and trophic disturbances of the nervous system such as Stargardt disease, degenerative and inflammatory retinopathy, cystic fibrosis, and conditions involving multidrug resistance; conditions involving lymphoid and myeloid cells, including AIDS, lymphomas, leukemias, neutropenia, anemia and autoimmune diseases; conditions involving the thyroid e.g. hyper and hypothyroidism; conditions involving the hypothalamus including obesity, diabetes, reproductive disorders and energy balance disorders; peripheral neuropathies including myelinopathies and axonopathies; and autoimmune and inflammatory diseases involving the nervous system including multiple sclerosis.

(II) is useful to map the locations of ABCL gene and related genes on chromosomes, as hybridization probes in diagnostic assays, for isolating corresponding chromosomal ABCL polypeptide genes, and to identify heritable tissue-degenerating diseases. The selective binding agents, including antiABCL antibodies are useful for in vivo imaging.

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L23 ANSWER 15 OF 30 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
DUPLICATE 1

ACCESSION NUMBER: 2002:873014 SCISEARCH

THE GENUINE ARTICLE: 606HV

TITLE: The Golgi GDPase of the fungal pathogen Candida albicans affects morphogenesis, glycosylation, and cell wall properties

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COUNTRY OF AUTHOR: USA; Spain

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LANGUAGE: English

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ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

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AB **Cell** wall mannoproteins are largely responsible for the adhesive properties and **immunomodulation** ability of the fungal pathogen *Candida albicans*. The outer chain extension of yeast mannoproteins occurs in the **lumen** of the Golgi **apparatus**. GDP-mannose must first be transported from the cytosol into the Golgi **lumen**, where mannose is transferred to mannans. GDP is hydrolyzed by a GDPase, encoded by *GDA1*, to GMP, which then exits the Golgi **lumen** in a coupled, equimolar exchange with cytosolic GDP-mannose. We **isolated** and disrupted the *C. albicans* homologue of the *Saccharomyces cerevisiae* *GDA1* gene in order to investigate its role in protein mannosylation and pathogenesis. *CaGdalp* shares four apyrase conserved regions with other nucleoside diphosphatases. Membranes prepared from the *C. albicans* disrupted *gdal/gdal* strain had a 90% decrease in the ability to hydrolyze GDP compared to wild type. The *gdal/gdal* mutants showed a severe defect in O-mannosylation and reduced **cell** wall phosphate content. Other **cell** wall-related phenotypes are present, such as elevated chitin levels and increased susceptibility to attack by beta-1,3-glucanases. Our results show that the *C. albicans* organism contains beta-mannose at their nonreducing end, differing from *S. cerevisiae*, which has only alpha-linked mannose residues in its O-glycans. Mutants lacking both alleles of *GDA1* grow at the same rate as the wild type but are partially blocked in hyphal formation in Lee solid medium and during induction in liquid by changes in temperature and pH. However, the mutants still form normal hyphae in the presence of serum and N-acetylglucosamine and do not change their adherence to HeLa **cells**. Taken together, our data are in agreement with the hypothesis that several pathways regulate the yeast-hypha transition. *Gdal/gdal* **cells** offer a model for discriminating among them.

L23 ANSWER 16 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-122281 [16] WPIDS
DOC. NO. NON-CPI: N2002-091709
DOC. NO. CPI: C2002-037516
TITLE: Secreted epithelial colon stromal-1 polypeptides
 and nucleic acids, useful for diagnosing, treating
 and preventing hematopoietic disorder,
 osteoporosis, Paget's disease, cancer, diabetes.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): LUETHY, R; POLVERINO, A J
PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC
COUNTRY COUNT: 95
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 2001098497 | A1 | 20011227 | (200216)* | EN | 134 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE | | | | | |
| DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG | | | | | |
| KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ | | | | | |
| PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN | | | | | |
| YU ZA ZW | | | | | |

Searcher : Shears 571-272-2528

10/602785

AU 2001019323 A 20020102 (200230)
EP 1294871 A1 20030326 (200323) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK
NL PT RO SE SI TR
JP 2004503220 W 20040205 (200412) 204

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|-----------------|----------|
| WO 2001098497 | A1 | WO 2000-US32479 | 20001128 |
| AU 2001019323 | A | AU 2001-19323 | 20001128 |
| EP 1294871 | A1 | EP 2000-982269 | 20001128 |
| | | WO 2000-US32479 | 20001128 |
| JP 2004503220 | W | WO 2000-US32479 | 20001128 |
| | | JP 2002-504645 | 20001128 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001019323 | A Based on | WO 2001098497 |
| EP 1294871 | A1 Based on | WO 2001098497 |
| JP 2004503220 | W Based on | WO 2001098497 |

PRIORITY APPLN. INFO: US 2000-724000 20001128; US
2000-599087 20000621

AN 2002-122281 [16] WPIDS

AB WO 200198497 A UPAB: 20020308

NOVELTY - An isolated murine or human secreted epithelial colon stromal-1 (Secs-1) polypeptide (I) having a fully defined sequence of 78 (S2) or 81 (S5) amino acids, respectively as given in specification, its allelic or splice variant, ortholog, fragment or mutant, is new.

DETAILED DESCRIPTION - An isolated murine or human secreted epithelial colon stromal-1 (Secs-1) polypeptide (I) comprising an amino acid sequence:

- (a) of (S2) or (S5);
- (b) encoded by the DNA insert in ATCC PTA-1753 and PTA-1755;
- (c) having a fully defined sequence of 54 (S3) (mature murine Secs-1 polypeptide) or 57 (S6) (mature human Secs-1 polypeptide) amino acids as given in specification, optionally further comprising an amino-terminal methionine;
- (d) for an ortholog of either (S2) or (S5);
- (e) which is at least about 70% identical to (S2) or (S5), where the polypeptide has an activity of (S2) or (S5);
- (f) for an allelic variant or splice variant of (S2) or (S5), the amino acid sequence encoded by the DNA insert in ATCC PTA-1753 and PTA-1755;
- (g) of (S2) or (S5) with at least one:
 - (i) conservative amino acid substitution;
 - (ii) amino acid insertion;
 - (iii) amino acid deletion;
 - (iv) a C- and/or N-terminal truncation; or
 - (v) at least one of the above mentioned modification of amino acid substitution, amino acid insertion, amino acid deletion,

Searcher : Shears 571-272-2528

C-terminal truncation, or N-terminal truncation, where the polypeptide has an activity of (S2) or (S5).

Alternately, (I) is a fragment of the amino acid sequence of (S2) or (S5) comprising at least about 25 amino acid residues, where the fragment has an activity of (S2) or (S5), or is antigenic.

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid molecule (II) comprising a nucleotide sequence:

(a) which has a fully defined sequence of 744 (S1) or 806 (S4) nucleotides as given in the specification;

(b) of the DNA insert in ATCC PTA-1753 and PTA-1755;

(c) encoding the polypeptide sequence of (S2) or (S5);

(d) which hybridizes under moderately or highly stringent conditions to the complement of any of (a)-(c);

(e) complementary to any of (a)-(c);

(f) encoding a polypeptide which is at least about 70% identical to (S2) or (S5), where the polypeptide has an activity of (S2) or (S5);

(g) encoding for an allelic or splice variant of (S1) or (S4), the nucleic acid sequence of the DNA insert in ATCC PTA-1753 and PTA-1755;

(h) which is a region of (S1) or (S4), the DNA insert in ATCC PTA-1753 and PTA-1755, (f) or (g) encoding a polypeptide fragment of at least 25 amino acid residues, where the polypeptide fragment has an activity of (S2) or (S5), or is antigenic;

(i) encoding a polypeptide having a sequence of (S2) or (S5) with at least one:

(i) conservative amino acid substitution,

(ii) amino acid insertion;

(iii) amino acid deletion;

(iv) a C- and/or N-terminal truncation; or

(v) at least one of the above mentioned modification of amino acid substitution, amino acid insertion, amino acid deletion, C-terminal truncation, or N-terminal truncation, where the encoded polypeptide has an activity of (S2) or (S5);

(j) which is a region of a nucleotide of (S1) or (S4) or the DNA insert in ATCC PTA-1753 and PTA-1755, or any of (f)-(i) comprising a fragment of at least 16 nucleotides;

(k) which hybridizes under stringent conditions to complement of (f)-(j), or which is complementary to (f)-(j);

(2) a vector (III) comprising (II);

(3) a host cell (IV) comprising (III);

(4) preparation of (I) by recombinant techniques;

(5) a recombinant (I) produced by the above mentioned method;

(6) an isolated polypeptide encoded by (II);

(7) a selective binding agent (V) or its fragment comprising at least one complementarity determining region with specificity for a polypeptide having the amino acid sequence of either (S2) or (S5), and which specifically binds (I). (V) is produced by immunizing an animal with a polypeptide comprising a sequence of (S2) or (S5);

(8) a hybridoma which produces (V);

(9) a composition (C) comprising (I) or (II) and a formulation agent;

(10) a polypeptide comprising a derivative of (I);

(11) a viral vector comprising (II);

(12) a fusion polypeptide (VI) comprising (I) fused to a

heterologous amino acid sequence;

(13) a device comprising a membrane suitable for implantation; and cells encapsulated within the membrane, where the cells secrete (I), and the membrane is permeable to the protein and impermeable to materials detrimental to the cells; and

(14) a transgenic non-human mammal (VII) comprising (II).

ACTIVITY - Osteopathic; cytostatic; nephrotrophic; antidiabetic; anorectic; immunomodulator; antipsoriatic; vulnerary; antiinfertility; gynecological; antiulcer; antiinflammatory.

MECHANISM OF ACTION - Gene therapy; agonist or antagonist of Secs-1 polypeptide activity; Secs-1 polypeptide cell therapy.

No supporting data is given.

USE - (I) is useful for identifying a compound which binds to a Secs-1 polypeptide which involves contacting (I) with a compound and determining the extent of binding of Secs-1 polypeptide to the compound. The method further involves determining the activity of the polypeptide when bound to the compound.

(IV) is useful for determining whether a compound inhibits Secs-1 polypeptide activity or Secs-1 polypeptide production which involves exposing (IV) to the compound and measuring Secs-1 polypeptide activity or Secs-1 polypeptide production in the cell.

(V) is useful for treating, preventing, ameliorating a Secs-1 polypeptide-related disease, condition or disorder. (V) is also useful for detecting or quantitating the amount of Secs-1 polypeptide.

(VII) is useful for identifying whether a compound inhibits Secs-1 polypeptide or Secs-1 polypeptide production which involves exposing (VII) to the compound and measuring Secs-1 polypeptide activity or production in the mammal.

(I) or (II) is useful for treating, preventing or ameliorating a disease condition such as hematopoietic disorder, osteoporosis, osteopetrosis, osteogenesis imperfecta, Paget's disease, periodontal disease, hypercalcemia, acute glomerulonephritis, chronic glomerulonephritis, cancer, diabetes, obesity or cachexia. (I) or (II) is also useful for diagnosing a pathological condition which involves determining the presence or amount of (I) or polypeptide encoded by (II) in a sample; and diagnosing a pathological condition, or susceptibility to pathological condition based on the presence or amount of expression of the polypeptide (all claimed).
Dwg.0/7

L23 ANSWER 17 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-114325 [15] WPIDS
 DOC. NO. CPI: C2002-035074
 TITLE: New human and mouse cystine-knot polypeptide designated as Cloaked-2, for treating or preventing kidney, heart (e.g. myocardial infarction) or liver (e.g. hepatitis) diseases.
 DERWENT CLASS: B04 D16
 INVENTOR(S): GAO, Y; PASZTY, C J
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC; (GAOY-I) GAO Y; (PASZ-I) PASZTY C J
 COUNTRY COUNT: 96
 PATENT INFORMATION:

| PATENT NO | KIND DATE | WEEK | LA | PG |
|-----------|-----------|------|----|----|
|-----------|-----------|------|----|----|

Searcher : Shears 571-272-2528

10/602785

WO 2001092308 A2 20011206 (200215)* EN 170
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE
KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO
NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ
VN YU ZA ZW
AU 2001065198 A 20011211 (200225)
US 2002106650 A1 20020808 (200254)
EP 1290169 A2 20030312 (200320) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK
NL PT RO SE SI TR
JP 2003534813 W 20031125 (200380) 144
MX 2002011808 A1 20030301 (200413)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2001092308 | A2 | WO 2001-US17478 | 20010529 |
| AU 2001065198 | A | AU 2001-65198 | 20010529 |
| US 2002106650 | A1 Provisional | US 2000-208550P | 20000601 |
| | Provisional | US 2000-223542P | 20000804 |
| | | US 2001-867274 | 20010529 |
| EP 1290169 | A2 | EP 2001-939708 | 20010529 |
| | | WO 2001-US17478 | 20010529 |
| JP 2003534813 | W | WO 2001-US17478 | 20010529 |
| | | JP 2002-500919 | 20010529 |
| MX 2002011808 | A1 | WO 2001-US17478 | 20010529 |
| | | MX 2002-11808 | 20021128 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001065198 | A Based on | WO 2001092308 |
| EP 1290169 | A2 Based on | WO 2001092308 |
| JP 2003534813 | W Based on | WO 2001092308 |
| MX 2002011808 | A1 Based on | WO 2001092308 |

PRIORITY APPLN. INFO: US 2000-223542P 20000804; US
2000-208550P 20000601; US
2001-867274 20010529

AN 2002-114325 [15] WPIDS

AB WO 200192308 A UPAB: 20020306

NOVELTY - An isolated polypeptide (I) comprising a cystine knot motif and designated as Cloaked-2, is new, where (I) comprises a sequence having 190 (I-H) or 185 (I-M) amino acids, derived from Homo sapiens and Mus musculus, respectively, which are given in the specification.

DETAILED DESCRIPTION - A new isolated polypeptide (I) has a sequence comprising:

(a) mature sequences of 190 (I-H) or 185 (I-M) amino acids, given in the specification,, optionally further comprising an

Searcher : Shears 571-272-2528

amino-terminal methionine;

(b) an ortholog of I-H or I-M, which has an activity of I-H or I-M;

(c) a sequence that is 70 - 99 % identical to I-H or I-M, which has an activity of I-H or I-M;

(d) a fragment of I-H or I-M having 25 amino acid residues, which has an activity of I-H or I-M;

(e) an allelic variant or splice variant of either I-H or I-M, or one of (a)-(c), where the polypeptide has an activity of I-H or I-M; or

(f) I-H or I-M with a modification, e.g. (conservative) amino acid substitution, an amino acid insertion, an amino acid deletion or C- and/or N-terminal truncation.

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid (II) comprising:

(a) a nucleotide sequence having 759 (II-H) or 636 (II-M) base pairs (bp), given in the specification;

(b) a nucleotide sequence encoding (I);

(c) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (a) or (b);

(d) a sequence comprising a fragment of (a)-(c) having 16 nucleotides; or

(e) a nucleotide sequence complementary to any of (a)-(d);

(2) (viral) vector(s) comprising (II);

(3) a host cell comprising the vector;

(4) producing (I) comprising culturing (3) to express (I), and optionally, isolating (I) from the culture;

(5) a polypeptide produced by (4);

(6) determining whether a compound inhibits Cloaked-2 polypeptide activity or production by exposing (3) to the compound and measuring Cloaked-2 polypeptide activity or production in (3);

(7) an antibody produced by immunizing an animal with a peptide I-H or I-M, or an antibody or its fragment that specifically binds (I);

(8) a hybridoma that produces a monoclonal antibody that binds to (I);

(9) detecting or quantitating the amount of Cloaked-2 polypeptide using the anti-Cloaked-2 antibody or its fragment;

(10) a selective binding agent or its fragment that specifically binds a polypeptide comprising:

(a) I-H or I-M;

(b) a fragment of I-H or I-M;

(c) a naturally occurring variant of (a) or (b); or

(d) a complementarity-determining region with specificity for (I);

(11) a selective binding agent produced by immunizing an animal with (I);

(12) a hybridoma that produces the selective binding agent;

(13) compositions comprising (I) or (II), and a pharmaceutical formulation agent;

(14) a polypeptide comprising a derivative of (I);

(15) a fusion polypeptide comprising (I) fused to a heterologous amino acid sequence;

(16) treating, preventing or ameliorating a disease, medical condition or disorder by administering (I) or the selective binding agent;

(17) diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

(a) determining the presence or amount of expression of (I) in a sample; and

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of (I);

(18) a device comprising:

(a) a membrane for implantation; and

(b) cells encapsulated within the membrane, where the cells secrete (I), and where the membrane is permeable to (I) and impermeable to materials detrimental to the cells;

(19) identifying a compound which binds to (I) comprising:

(a) contacting (I) with a compound; and

(b) determining the extent of binding of (I) to the compound;

(20) a method of modulating levels of (I) in an animal by administering (II); and

(21) a transgenic non-human mammal comprising (II).

ACTIVITY - Nephrotropic; cardiant; immunomodulator; hepatotropic; antiinflammatory; antithyroid; cytostatic; neuroprotective; antianemic; hypotensive; antiarrhythmic; antiarteriosclerotic; muscular; antidiabetic; anorectic;

MECHANISM OF ACTION - Gene therapy; cell therapy; antisense therapy.

USE - Nucleic acid (II) encoding (I) are useful in gene therapy or antisense therapy. (I) and (II) are useful for treating, preventing, ameliorating or detecting diseases and disorders of the kidney (e.g. anemia, hypertension or low blood pressure), heart (e.g. cardiac hypertrophy, congestive heart failure, myocardial infarction, arrhythmias, atherosclerosis, hypertension or low blood pressure), skeletal muscle (e.g. muscular dystrophy or cachexia), placenta (e.g. congenital abnormalities or miscarriage), liver (e.g. hepatitis or cirrhosis), pancreas (e.g. diabetes or pancreatitis), thyroid (e.g. Grave's disease or myxedema) or adrenal cortex (e.g. Cushing's disease or Addison's disease), homeostasis or metabolic diseases (e.g. obesity, cancer or myopathies), infections, or autoimmune diseases. Selective binding agents may be used to modulate the biological activities of Cloaked-2 polypeptides or to detect Cloaked-2 polypeptide levels in a sample. Transgenic non-human animals are useful for drug candidate screening.

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L23 ANSWER 18 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2001-611392 [70] WPIDS
 DOC. NO. NON-CPI: N2001-456385
 DOC. NO. CPI: C2001-182656
 TITLE: Nucleic acids encoding interleukin 17 receptor like polypeptides, useful for preventing, diagnosing and treating, e.g. leukemia, asthma, diabetes, psoriasis and glaucoma.
 DERWENT CLASS: A96 B04 D16 P14 S03
 INVENTOR(S): JING, S
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC; (JING-I) JING S
 COUNTRY COUNT: 96
 PATENT INFORMATION:

10/602785

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 2001068859 | A2 | 20010920 | (200170)* | EN | 157 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ | | | | | |
| DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE | | | | | |
| KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO | | | | | |
| NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ | | | | | |
| VN YU ZA ZW | | | | | |
| AU 2001047545 | A | 20010924 | (200208) | | |
| US 2002045213 | A1 | 20020418 | (200228) | | |
| EP 1266002 | A2 | 20021218 | (200301) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK | | | | | |
| NL PT RO SE SI TR | | | | | |
| US 2003099980 | A1 | 20030529 | (200337) | | |
| JP 2003526370 | W | 20030909 | (200360) | | 162 |
| MX 2002009055 | A1 | 20030301 | (200413) | | |
| US 2004048338 | A1 | 20040311 | (200419) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2001068859 | A2 | WO 2001-US8678 | 20010315 |
| AU 2001047545 | A | AU 2001-47545 | 20010315 |
| US 2002045213 | A1 Provisional | US 2000-189816P | 20000316 |
| | CIP of | US 2000-724460 | 20001128 |
| | | US 2001-809567 | 20010315 |
| EP 1266002 | A2 | EP 2001-920498 | 20010315 |
| | | WO 2001-US8678 | 20010315 |
| US 2003099980 | A1 Provisional | US 2000-189816P | 20000316 |
| | Div ex | US 2001-809567 | 20010315 |
| | | US 2002-216156 | 20020808 |
| JP 2003526370 | W | JP 2001-567343 | 20010315 |
| | | WO 2001-US8678 | 20010315 |
| MX 2002009055 | A1 | WO 2001-US8678 | 20010315 |
| | | MX 2002-9055 | 20020917 |
| US 2004048338 | A1 Provisional | US 2000-189816P | 20000316 |
| | CIP of | US 2000-724460 | 20001128 |
| | Cont of | US 2001-809567 | 20010315 |
| | | US 2003-616788 | 20030710 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001047545 | A Based on | WO 2001068859 |
| EP 1266002 | A2 Based on | WO 2001068859 |
| JP 2003526370 | W Based on | WO 2001068859 |
| MX 2002009055 | A1 Based on | WO 2001068859 |

PRIORITY APPLN. INFO: US 2000-724460 20001128; US
2000-189816P 20000316; US
2001-809567 20010315; US
2002-216156 20020808; US

Searcher : Shears 571-272-2528

2003-616788 20030710

AN 2001-611392 [70] WPIDS

AB WO 200168859 A UPAB: 20011129

NOVELTY - Nucleic acids (I) encoding interleukin (IL) 17 receptor like polypeptides (V), are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) an isolated nucleic acid molecule (NAM) (I) comprising a nucleotide sequence comprising:
 - (a) a defined 3083 nucleotide sequence (N1) given in the specification;
 - (b) a nucleotide sequence encoding a polypeptide comprising a defined 738 amino acid sequence (A1) given in the specification;
 - (c) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (a) or (b) (the encoded polypeptide has the same activity as the polypeptide (A1));
 - (d) a nucleotide sequence complementary to (a)-(c);
- (2) a vector (II) comprising (I);
- (3) a host cell (III) comprising (II);
- (4) a process (IV) of producing an interleukin (IL) 17 receptor like polypeptide, comprising culturing the host cell (III) under suitable conditions to express the polypeptide (an optionally isolating the polypeptide from the culture);
- (5) a polypeptide (V) produced via (IV);
- (6) a process (VI) for determining whether a compound inhibits IL-17 receptor like polypeptide activity or production comprising exposing the cell (III) to the compound and measuring IL-17 receptor like polypeptide activity or production in the cell;
- (7) an antibody (VII) produced by immunizing an animal with a peptide comprising (A1);
- (8) a hybridoma (VIII) that produces (VII);
- (9) a method (IX) of detecting or quantitating the amount of an IL-17 receptor like polypeptide in a sample comprising contacting a sample suspected of containing IL-17 receptor like polypeptides with (VII) and detecting binding of the antibody;
- (10) a selective binding agent (X) (or fragment) that specifically binds at least 1 polypeptide which comprises (A1) (or a fragment or naturally occurring variant);
- (11) a method (XI) for treating and/or preventing a disease and/or disorder associated with altered levels of IL-17 receptor like polypeptides, comprising administering (X) to a patient;
- (12) a hybridoma (XII) that produces (X);
- (13) a composition (XIII) comprising the polypeptide encoded by (I) and a formulation agent;
- (14) a composition (XIV) comprising (I) and a formulation agent;
- (15) a fusion peptide (XV) comprising (V) fused to a heterologous amino acid sequence;
- (16) a method (XVI) of treating and/or preventing a condition comprising administering (V) of the polypeptide encoded by (I);
- (17) a method (XVII) of diagnosing a pathological condition or susceptibility in a subject caused by or resulting from abnormal levels of IL-17 receptor like polypeptide, comprising:
 - (a) determining the presence or amount of expression of (V) or the polypeptide encoded by (I) in a sample; and
 - (b) diagnosing the condition based on the presence or amount of

the polypeptide;

(18) a **device** (XVIII) comprising:

(a) a membrane suitable for implantation; and
(b) the IL-17 receptor like polypeptide or cells encapsulated within the membrane which secrete (V) (the membrane is permeable to the protein and **impermeable** to materials detrimental to the cells);

(19) a method (IXX) of identifying a compound which binds to a polypeptide, comprising:

(a) contacting (V) with a compound; and
(b) determining the extent of binding of the polypeptide to the compound;

(20) a method (XX) of modulating levels of a polypeptide in an animal comprising administering (I);

(21) a transgenic non-human mammal (XXI) comprising (I);

(22) a method (XXII) of identifying antagonists of IL-17 receptor like polypeptide biological activity, comprising:

(a) contacting an IL-17 receptor like polypeptide;
(b) detecting the biological activity of an IL-17 receptor like polypeptide in the presence of the compound; and

(c) comparing the level of IL-17 receptor like polypeptide biological activity in the presence and absence of the compound;

(23) a method (XXIII) of modulating the levels of a polypeptide in an animal comprising administering (I);

(24) an antagonist (XXIV) (a selective binding agent, small molecule, antisense oligonucleotide, peptide or derivative having specificity for the IL-17 receptor like polypeptide) of IL-17 receptor like polypeptide activity; and

(25) a method (XXV) of reducing cellular proliferation of IL-17 receptor like polypeptides, comprising transforming or transfecting cells with a nucleic acid encoding (XXIV).

ACTIVITY - Immunomodulatory; antiinflammatory; antidiabetic; immunosuppressive; antimicrobial; hepatic; anabolic; anorectic; antialzheimers; antiparkinsonian; anticonvulsant; antiaasthmatic; dermatological; renal; osteopathic; vascular; cytostatic; antileukemic; antiinfertility; ophthalmological.

No biological data given.

MECHANISM OF ACTION - Gene therapy; vaccine.

USE - (I) And (V) may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate IL-17 receptor like polypeptide (IL17rlp) expression. For example, (I) (or (II)) and (V) may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of IL17rlp by expressing inactive proteins or to supplement the patients own production of IL17rlp ((XVI), (XX) and (XXIII)). Additionally, (I) may be used to produce the IL17rlp, by inserting the nucleic acids into a host cell (III) and culturing the cell to express the protein (IV). (I) And its complements may also be used as DNA probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and therefore which patients may be in need of restorative therapy. The IL17rlp may also be used as antigens in the production of antibodies (VII) against (V) and in assays ((IXX) and (XXII)) to identify modulators of (X) expression and activity. The anti-(V) antibodies and antagonists may also be used to down regulate expression and activity (XI).

The anti-(V) antibodies may also be used as diagnostic agents for detecting the presence of IL17rlp in samples (e.g. by enzyme linked immunosorbant assay (ELISA)) (XVII) (claimed).

Disorders that may be prevented, diagnosed and/or treated by the above methods include, for example immune disorders (e.g. inflammation, diabetes and transplant rejection), infections (e.g. hepatitis, septic shock and septicemia), weight disorders (e.g. anorexia, cachexia and obesity), neuronal disfunction (e.g. Alzheimer's disease, Parkinson's disease and epilepsy), lung disorders (e.g. cystic fibrosis, asthma and emphysema), skin diseases (e.g. eczema and psoriasis), kidney disease (e.g. glomerulonephritis), bone diseases (e.g. osteoporosis, Paget's disease and hypercalcemia), vascular disorders (e.g. stroke, atherosclerosis and restenosis), cancers (e.g. leukemia, myeloma and breast cancer), reproductive disorders (e.g. infertility and miscarriage), eye disorders (e.g. glaucoma and retinal neuropathy) (full details given in the specification).
Dwg.0/4

L23 ANSWER 19 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-055100 [07] WPIDS
 CROSS REFERENCE: 2002-155217 [20]
 DOC. NO. CPI: C2002-015643
 TITLE: Three human nucleic acids encoding interleukin 17 (IL-17) receptor like polypeptides, useful for treating, diagnosing, ameliorating or preventing immune system disorders (e.g. psoriatic arthritis) and infections (e.g. viral infections).
 DERWENT CLASS: A96 B04 D16
 INVENTOR(S): ELLIOT, G S; JING, S; MEDLOCK, E; NGUYEN, H Q; SILBINGER, S M; YEH, R
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC
 COUNTRY COUNT: 96
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|--|------|----------|-----------|----|-----|
| WO 2001068705 | A2 | 20010920 | (200207)* | EN | 240 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2001059029 | A | 20010924 | (200208) | | |
| EP 1265924 | A2 | 20021218 | (200301) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR | | | | | |
| JP 2003527117 | W | 20030916 | (200362) | | 227 |
| MX 2002009024 | A1 | 20030201 | (200413) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-----------|------|-------------|------|
|-----------|------|-------------|------|

10/602785

| | | | |
|---------------|----|----------------|----------|
| WO 2001068705 | A2 | WO 2001-US8688 | 20010316 |
| AU 2001059029 | A | AU 2001-59029 | 20010316 |
| EP 1265924 | A2 | EP 2001-932510 | 20010316 |
| | | WO 2001-US8688 | 20010316 |
| JP 2003527117 | W | JP 2001-567795 | 20010316 |
| | | WO 2001-US8688 | 20010316 |
| MX 2002009024 | A1 | WO 2001-US8688 | 20010316 |
| | | MX 2002-9024 | 20020913 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001059029 | A Based on | WO 2001068705 |
| EP 1265924 | A2 Based on | WO 2001068705 |
| JP 2003527117 | W Based on | WO 2001068705 |
| MX 2002009024 | A1 Based on | WO 2001068705 |

PRIORITY APPLN. INFO: US 2001-266159P 20010202; US
2000-189923P 20000316; US
2000-204208P 20000512; US
2000-723232 20001127

AN 2002-055100 [07] WPIDS

CR 2002-155217 [20]

AB WO 200168705 A UPAB: 20040223

NOVELTY - Three human nucleic acids encoding interleukin 17 (IL-17) receptor like polypeptides, are new.

DETAILED DESCRIPTION - Three human nucleic acids encoding interleukin 17 (IL-17) receptor like polypeptides, are new.

A nucleic acid (N1) encoding an IL-17 receptor like polypeptide is selected from:

(a) the 1841 (S1), 2015 (S2) or 1713 (S3) nucleotide sequence defined in the specification;

(b) a nucleotide sequence encoding a polypeptide having the 502 (S4), 560 (S5), 385 (S6) amino acid sequence defined in the specification;

(c) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (a) or (b), where the polypeptide encoded by the nucleotide sequence has an activity of S4, S5, or S6; or

(d) a nucleotide sequence complementary to any of (a)-(c).

INDEPENDENT CLAIMS are included for the following:

(1) isolated nucleic acids (N2) and (N3) described in the TECHNOLOGY FOCUS section of the abstract;

(2) a vector, preferably a viral vector, comprising N1, N2 or N3;

(3) a host cell (H1) comprising N1, N2 or N3 operatively linked to a regulatory sequence other than the promoter for a native IL-17 receptor like polypeptide;

(4) a host cell (H2) modified by transformation or transfection with a regulatory nucleic acid, where the regulatory nucleic acid promotes transcription or translation N1, N2 or N3 or its allelic variant or its a fragment;

(5) a process (M1) of producing an IL-17 receptor like polypeptide comprising culturing H1 or H2;

(6) a polypeptide produced by M1;

Searcher : Shears 571-272-2528

- (7) a process for detecting a candidate inhibitor or stimulator of IL-17 receptor like polypeptide activity or production;
- (8) an isolated polypeptide (P1) comprising the mature amino acid sequence of S4, S5, or S6;
- (9) isolated polypeptides (P2) and (P3) described in the TECHNOLOGY FOCUS section of the abstract;
- (10) an isolated polypeptide (P4) encoded by N1, N2 or N3;
- (11) an antibody (AB1) produced by immunizing an animal with a peptide comprising an amino acid sequence of S4, S5, or S6;
- (12) a monoclonal antibody (AB2) or its fragment that specifically binds P1-P4;
- (13) a hybridoma that produces a monoclonal antibody that binds to a peptide comprising an amino acid sequence of S4, S5, or S6;
- (14) a method of detecting or quantitating the amount of IL-17 receptor like polypeptide using AB1 or AB2;
- (15) selective binding agent (A1), (A2) and (A3) or their fragments;
- (16) a method for treating, preventing, or ameliorating a disease, condition, or disorder comprising administering to a patient an effective amount of A1 or A2;
- (17) a hybridoma that produces a selective binding agent capable of binding a polypeptide having the sequence of S4, S5 or S6;
- (18) a polypeptide (P5) comprising a derivative of P1, P2 or P3;
- (19) a fusion polypeptide (P6) comprising P1, P2, P3 or P4 fused to a heterologous amino acid sequence which is an immunoglobulin constant domain or its fragment or variant;
- (20) a method for treating, preventing or ameliorating a medical condition in a mammal resulting from decreased levels or activity of IL-17 receptor like polypeptide comprising administering P1, P2, P3, N1, N2 or N3, or the polypeptide encoded by N1, N2 or N3, or a nucleic acid that promotes transcription or translation of N1, N2 or N3;
- (21) a method for treating, preventing or ameliorating a medical condition in a mammal resulting from increased levels or activity of IL-17 receptor like polypeptide comprising administering A1;
- (22) a method for treating, preventing or ameliorating a medical condition in a mammal resulting from increased levels or activity of IL-17 receptor like polypeptide comprising administering an antisense oligonucleotide that inhibits transcription or translation of N1, N2 or N3;
- (23) a method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject caused by or resulting from abnormal level of IL-17 receptor like polypeptide;
- (24) a device, comprising a membrane suitable for implantation and P1-P3 or the IL-17-receptor like polypeptide;
- (25) a method of identifying a compound which binds to a polypeptide comprising contacting P1-P4 with a compound and determining the extent of binding of the polypeptide to the compound;
- (26) a method of modulating levels of a polypeptide in an animal comprising administering to the animal N1, N2 or N3;
- (27) a transgenic non-human mammal comprising N1, N2 or N3;
- (28) a diagnostic reagent (R1) comprising a detectably labeled

polynucleotide encoding S4, S5 or S6 or its fragment, variant or homolog including its allelic variants and spliced variants;

(29) a method (M2) for detecting the presence of IL-17 receptor like nucleic acids in a tissue or cellular sample;

(30) a method (M3) of identifying a candidate inhibitor of an interaction of an IL-17 receptor like polypeptide with an IL-17E ligand;

(31) a method (M4) of treating, preventing or ameliorating a pathological condition mediated by an IL-17E ligand comprising administering therapeutically effective amount of a molecule that specifically binds to IL-17E ligand or to an IL-17 receptor like polypeptide;

(32) a method (M5) of inhibiting undesirable interaction of IL-17 receptor like polypeptide with IL-17E ligand comprising administering a therapeutically effective amount of a molecule capable of binding the IL-17 receptor like polypeptide or IL-17E ligand; and

(33) a method of antagonizing the activity of an IL-17 receptor like polypeptide.

ACTIVITY - Immunomodulatory; antiarthritic; antipsoriatic; antimicrobial; anorectic; nootropic; neuroprotective; antiasthmatic; antiallergic; dermatological; cytostatic.

No suitable biological data given.

MECHANISM OF ACTION - IL-17 receptor like polypeptide modulator; antisense therapy.

No suitable biological data given.

USE - A molecule that specifically binds to IL-17E ligand or to an IL-17 receptor like polypeptide is useful for treating a pathological condition related to immune system dysfunction, inflammation or infection (claimed).

The IL-17 receptor like polypeptide and nucleic acids, agonists and antagonists (e.g. antisense oligonucleotides) are useful for treating, diagnosing, ameliorating or preventing immune system disorders (e.g. psoriatic arthritis), infections (e.g. viral infections), weight disorders (e.g. obesity), neuronal dysfunction disorders (e.g. Alzheimer's disease), lung disorders (e.g. asthma), skin disorders (e.g. eczema), vascular system disorders (e.g. ischemia) and tumors.

Dwg.0/23

L23 ANSWER 20 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2001-529841 [58] WPIDS
 DOC. NO. NON-CPI: N2001-393256
 DOC. NO. CPI: C2001-158035
 TITLE: Novel interleukin-17 like polypeptides and nucleic acid molecules encoding them useful for diagnosis, prevention and treatment of inflammatory, autoimmune disease, allergies, asthma and organ or graft rejection.
 DERWENT CLASS: B04 D16 Q51 S03
 INVENTOR(S): LANGERVIK, D; BASS, M B; JING, S
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC; (VOLV) VOLVO TRUCKS NORTH AMERICA INC; (BASS-I) BASS M B; (JING-I) JING S
 COUNTRY COUNT: 95
 PATENT INFORMATION:

10/602785

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 2001059120 | A2 | 20010816 | (200158)* | EN | 117 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE | | | | | |
| DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG | | | | | |
| KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ | | | | | |
| PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN | | | | | |
| YU ZA ZW | | | | | |
| AU 2001036725 | A | 20010820 | (200175) | | |
| CA 2358787 | A1 | 20020527 | (200250) | EN | |
| EP 1255837 | A2 | 20021113 | (200282) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK | | | | | |
| NL PT RO SE SI TR | | | | | |
| JP 2003523745 | W | 20030812 | (200355) | | 273 |
| US 2003166164 | A1 | 20030904 | (200359) | | |
| MX 2002007674 | A1 | 20030101 | (200373) | | |
| US 2004023335 | A1 | 20040205 | (200411) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2001059120 | A2 | WO 2001-US3916 | 20010207 |
| AU 2001036725 | A | AU 2001-36725 | 20010207 |
| CA 2358787 | A1 | CA 2001-2358787 | 20011015 |
| EP 1255837 | A2 | EP 2001-908913 | 20010207 |
| | | WO 2001-US3916 | 20010207 |
| JP 2003523745 | W | JP 2001-558456 | 20010207 |
| | | WO 2001-US3916 | 20010207 |
| US 2003166164 | A1 Provisional | US 2000-180864P | 20000208 |
| | Cont of | US 2000-722990 | 20001127 |
| | | US 2003-375876 | 20030226 |
| MX 2002007674 | A1 | WO 2001-US3916 | 20010207 |
| | | MX 2002-7674 | 20020808 |
| US 2004023335 | A1 Provisional | US 2000-180864P | 20000208 |
| | Div ex | US 2000-722990 | 20001127 |
| | | US 2002-214545 | 20020808 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001036725 | A Based on | WO 2001059120 |
| EP 1255837 | A2 Based on | WO 2001059120 |
| JP 2003523745 | W Based on | WO 2001059120 |
| MX 2002007674 | A1 Based on | WO 2001059120 |

PRIORITY APPLN. INFO: US 2000-722920 20001127; US
2000-180864P 20000208; US
2000-722990 20001127; US
2003-375876 20030226; US
2002-214545 20020808

AN 2001-529841 [58] WPIDS
AB WO 200159120 A UPAB: 20021212

Searcher : Shears 571-272-2528

NOVELTY - An isolated nucleic acid molecule (I) encoding polypeptide (II), the nucleotide complementary to (I), and an amino acid sequence 70 - 99% identical to (II), are new.

DETAILED DESCRIPTION - Nucleotide sequence (I) is selected from the following:

(i) a fully defined nucleotide sequence of 1177 base pairs as given in the specification;

(ii) a nucleotide sequence encoding a polypeptide (II) with a fully defined sequence of 227 amino acids as given in the specification;

(iii) a nucleotide sequence that hybridizes to the complement of (i) or (ii), where the encoded polypeptide has the activity of (II); and

(iv) a nucleotide sequence complementary to (I).

INDEPENDENT CLAIMS are also included for the following:

(1) a vector (III) comprising (I);

(2) a host cell (IV) comprising (III);

(3) producing (II) by culturing host **cells** (IV) and expressing and **isolating** (II);

(4) a polypeptide (V) produced by (3);

(5) identifying candidate inhibitors of IL-17 like polypeptide activity by exposing (IV) to the potential inhibitors and measuring IL-17 like activity in (IV);

(6) identifying candidate stimulators of IL-17 like polypeptide activity;

(7) an antibody (VI) produced by immunizing an animal with (II);

(8) detecting or quantifying the amount of (II) in a sample by contacting the sample with (VI) or a fragment, and detecting any binding;

(9) a selective binding agent (VII) or fragment comprising at least one complementary determining region with specificity for (II);

(10) a hybridoma (VIII) that produces (V) or a selective binding agent capable of binding (II);

(11) a composition (IX) comprising (II);

(12) a polypeptide (X) comprising a derivatives of (II);

(13) a composition (XI) comprising (I);

(14) a fusion polypeptide (XII) comprising (II) fused to a heterologous amino acid sequence;

(15) a **device** (XIII) comprising:

(a) a membrane suitable for implantation; and

(b) cells that secrete (II) encapsulated within the membrane, where the membrane is permeable to (II) and **impermeable** to substances detrimental to the cells;

(16) modulating levels of a polypeptide in an animal by administering (I);

(17) an antagonist (XIV) of (I), chosen from IL-17 like selective binding agents, small molecules, antisense oligonucleotides and peptides or their derivatives, having specificity for (I);

(18) a transgenic non-human mammal (XV) comprising (I);

(19) reducing cellular production of (I), by transforming or transfecting cells with a nucleic acid encoding (VI);

(20) a diagnostic reagent (XVI) comprising a labeled polynucleotide encoding (II), or a fragment, variant or homolog

including allelic and spliced variants;

(21) determining the presence of IL-17 like nucleic acids in a biological sample comprising:

(i) contacting the sample with a diagnostic reagent;

(ii) detecting hybridization between the nucleic acid and the diagnostic reagent; and

(iii) comparing the level of hybridization between a known concentration of IL-17 like nucleic acid and the diagnostic reagent.

ACTIVITY - Antiinflammatory; immunosuppressive; antiasthmatic; neuroprotective; antirheumatic; antiallergic. No supporting data is given.

MECHANISM OF ACTION - Gene therapy; Modulator of (II).

USE - (II) is useful for diagnosing a pathological condition or susceptibility to a pathological condition in a subject, caused by or resulting from abnormal levels of IL-17 like polypeptide, by determining the presence or amount of expression of (II) in a sample and comparing the level of polypeptide in a biological, tissue or cellular sample from normal subjects and also for identifying antagonists of (II) or a compound which binds to (II). (II) and the selective binding agent are useful for treating, preventing or ameliorating a disease, condition or disorder associated with altered levels of IL-17 like polypeptide. (I) is useful for modulating the levels of (II) in an animal. Anti-IL-17 like antibody or its fragments are useful for detecting or quantifying the amount of (I) in a sample. Host cells (IV) are useful for identifying candidate inhibitors or stimulators of (II). Diagnostic reagent (XVI) is useful for determining the presence of IL-17 like nucleic acids in biological, tissue or cellular sample (all claimed).

(II) is useful for identifying binding partners, agonists and antagonists which can be used for treating one or more diseases or disorders, and for cloning IL-17 like receptors, using an expression cloning strategy. Radiolabeled or affinity/activity-tagged IL-17 polypeptides are useful in binding assays to identify a cell type or cell line or tissue that express IL-17 like receptors. A radiolabeled or tagged IL-17 like polypeptide is useful as an affinity ligand to identify and isolate from an expression library the subset of cells which express the IL-17 like receptors on their surface. IL-17 like polypeptide, agonist and antagonist are useful for treating acute and chronic inflammation such as rheumatic diseases, graft versus host disease and multiple sclerosis. IL-17 like antagonists are useful for treating and preventing inflammatory disease, autoimmune disease, allergies, asthma and organ or graft rejection in a patient and also for inhibiting T cell proliferation and/or activation, in vivo B cell proliferation or immunoglobulin secretion, and for blocking the effects of IL-17 in inducing bone destruction. (I) is useful for mapping the location of the IL-17 like gene and related genes on chromosomes, as hybridization probes in diagnostic assays to test, either qualitatively or quantitatively for the presence of IL-17 like DNA or corresponding RNA in mammalian tissue and to prevent or treat a number of diseases and conditions. (II) is useful as an immunogen for producing antibodies which are useful in vivo and in vitro diagnostic purposes and as therapeutics. Non-human animals in which the promoter for one or more of IL-17 like polypeptides is either activated or inactivated are useful for drug candidate screening.

Dwg.0/3

10/602785

L23 ANSWER 21 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-536401 [59] WPIDS
DOC. NO. CPI: C2001-159661
TITLE: New chondromodulin-I like polypeptides and
polynucleotides useful for treating, preventing or
ameliorating diseases resulting from abnormal
levels of ChMlrp, or for inducing cartilage
formation and bone growth.
DERWENT CLASS: A96 B04 D16
INVENTOR(S): CLARKIN, K; JUNG, J; NGUYEN, H
PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC
COUNTRY COUNT: 95
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|-----|-----|
| WO 2001053344 | A2 | 20010726 | (200159)* | EN | 199 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2001036477 | A | 20010731 | (200171) | | |
| EP 1261639 | A2 | 20021204 | (200280) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR | | | | | |
| JP 2003520590 | W | 20030708 | (200347) | 221 | |
| MX 2002007119 | A1 | 20030401 | (200415) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|----------------|----------|
| WO 2001053344 | A2 | WO 2001-US1700 | 20010118 |
| AU 2001036477 | A | AU 2001-36477 | 20010118 |
| EP 1261639 | A2 | EP 2001-908629 | 20010118 |
| | | WO 2001-US1700 | 20010118 |
| JP 2003520590 | W | JP 2001-553816 | 20010118 |
| | | WO 2001-US1700 | 20010118 |
| MX 2002007119 | A1 | WO 2001-US1700 | 20010118 |
| | | MX 2002-7119 | 20020719 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001036477 | A Based on | WO 2001053344 |
| EP 1261639 | A2 Based on | WO 2001053344 |
| JP 2003520590 | W Based on | WO 2001053344 |
| MX 2002007119 | A1 Based on | WO 2001053344 |

PRIORITY APPLN. INFO: US 2000-724310 20001128; US
2000-176898P 20000119

Searcher : Shears 571-272-2528

AN 2001-536401 [59] WPIDS

AB WO 200153344 A UPAB: 20011012

NOVELTY - An isolated nucleic acid (N1) encoding a chondromodulin-I like polypeptide, is new.

DETAILED DESCRIPTION - An isolated nucleic acid (N1) encoding a chondromodulin-I like polypeptide, is new.

(I) is selected from:

(a) a fully defined sequence of 1206 base pair (bp) (I) given in the specification

(b) a nucleotide sequence encoding a polypeptide having a defined 317 amino acid sequence (II) also given in the specification or a polypeptide at least 70% identical to (II);

(c) a nucleotide sequence which hybridizes to (I) or to a sequence encoding (II);

(d) a nucleotide sequence encoding an allelic variant or splice variant of (I);

(e) a nucleotide sequence encoding a polypeptide fragment of at least 25 amino acids and has an activity of (II);

(f) a nucleotide sequence which encodes (II) with at least one amino acid substitution, insertion, deletion, C- or N-terminal truncation, or a modification;

(g) a fragment of at least 16 nucleotides of (I) or (a), (d), (e) or (f);

(h) a nucleotide sequence complementary to (a)-(g); or

(i) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of the above sequences.

INDEPENDENT CLAIMS are also included for the following:

(1) a vector comprising the nucleic acids;

(2) a host cell comprising the vector;

(3) a process for producing a chondromodulin I (ChMIRp) polypeptide by culturing the host cell of (2) under conditions allowing the expression of the polypeptide;

(4) a polypeptide produced from (3);

(5) methods for identifying candidate inhibitors of ChMIRp polypeptide activity or production by exposing the host cell to the candidate inhibitors or stimulators, measuring ChMIRp in cells, and comparing the activity of ChMIRp in cells exposed to the candidate inhibitor or stimulator with that of the unexposed cells;

(6) an isolated polypeptide comprising an amino acid sequence selected from:

(a) the sequence of (II);

(b) the mature sequence of (II), optionally comprising the amino-terminal methionine;

(c) an ortholog of (II), where the encoded polypeptide has an activity of (II);

(d) an amino acid sequence at least 70% identical to (II);

(e) a fragment of (II) comprising at least 25 residues;

(f) an allelic variant or splice variant of (II) or (b) to (d);

(g) a sequence of (II) with at least one amino acid substitution, insertion, deletion, C- or N-terminal truncation, or a modification.

(7) an isolated polypeptide encoded by (I);

(8) an antibody which is produced by immunizing an animal with (II), or that specifically binds to (II);

(9) a hybridoma that produces a monoclonal antibody that binds

to (II), or that produces a selective binding agent capable of binding (II);

(10) a method of detecting or quantitating the amount of ChMIRp in a sample by contacting a sample suspected of containing ChMIRp polypeptide with an anti-h2520-109 antibody or fragment, and detecting the binding of the antibody or fragment;

(11) a selective binding agent or its fragment that specifically binds at least one polypeptide where the polypeptide comprises (II), its fragment or variant;

(12) a selective binding agent or its fragment comprising at least one complementary determining region with specificity for (II);

(13) a method for treating, preventing or ameliorating a disease, condition or disorder by administering a selective binding agent of (11);

(14) a selective binding agent produced by immunizing an animal with (II);

(15) a polypeptide (P1) comprising a derivative of the polypeptide of (6) or (7);

(16) a viral vector comprising (I);

(17) a fusion polypeptide comprising (II) fused to a heterologous amino acid sequence;

(18) a method for treating, preventing or ameliorating a medical condition in a mammal resulting from a decreased levels of ChMIRp polypeptide by administering (II) or a polypeptide encoded by (I);

(19) a method of diagnosing a pathological condition or susceptibility to a pathological conditions caused by or resulting from abnormal levels of ChMIRp polypeptide;

(20) devices comprising a membrane for implantation, and cells encapsulated within the membrane, where the cells secrete a polypeptide, and the membrane is permeable to the protein or polypeptide, and impermeable to materials detrimental to the cell;

(21) a method of identifying a compound which binds to a polypeptide by contacting (II) with a compound and determining the extent of binding of the polypeptide to the compound;

(22) a method of modulating the polypeptide level in an animal by administering to (I) to the animal;

(23) a transgenic non-human mammal comprising (I);

(24) a diagnostic reagent comprising a detectably labeled polynucleotide encoding (II), its fragment, variant, or homolog;

(25) methods of determining the presence of ChMIRp nucleic acids in a biological sample, such as a tissue or cellular sample; and

(26) an antagonist of ChMIRp polypeptide activity selected from ChMIRp selective binding agents, small molecules, antisense oligonucleotides, and peptides or derivatives having specificity for ChMIRp polypeptide.

ACTIVITY - Osteogenic.

MECHANISM OF ACTION - Gene therapy.

USE - The polypeptides are useful for treating, preventing or ameliorating diseases resulting from abnormal levels of ChMIRp, for inducing cartilage formation and bone growth, for prophylactic and therapeutic treatment of humans and animals for indications resulting from decreased levels of ChMIRp or where it is determined that administration of ChMIRp polypeptide will result in the

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amelioration or cure of the indications. The polypeptides may also be used as immunogen. Nucleic acids may be used to map the locations of the ChMlrp gene and related genes on chromosomes, for chromosome identification and mapping, as antisense inhibitors of ChMlrp, as hybridization probes, and for gene therapy.

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L23 ANSWER 22 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-451665 [48] WPIDS
DOC. NO. NON-CPI: N2001-334361
DOC. NO. CPI: C2001-136411
TITLE: New tumor necrosis factor receptor /
osteoprotegerin-like (TNFr/OPG-like) polypeptides
useful for diagnosis and treatment of associated
disease.
DERWENT CLASS: A96 B04 D16 P14 S03
INVENTOR(S): BENNETT, B D; BOEDIGHEIMER, M J; FOX, G M; JING, S;
SHU, J; WELCHER, A A; LUETHY, R
PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC; (BENN-I) BENNETT B D; (BOED-I)
BOEDIGHEIMER M J; (FOXG-I) FOX G M; (JING-I) JING
S; (LUET-I) LUETHY R; (SHUJ-I) SHU J; (WELC-I)
WELCHER A A
COUNTRY COUNT: 95
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 2001044472 | A1 | 20010621 | (200148)* | EN | 208 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2001022625 | A | 20010625 | (200162) | | |
| EP 1238077 | A1 | 20020911 | (200267) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR | | | | | |
| US 2003077246 | A1 | 20030424 | (200330) | | |
| MX 2002006027 | A1 | 20021201 | (200377) | | |
| JP 2004500063 | W | 20040108 | (200410) | | 304 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2001044472 | A1 | WO 2000-US33858 | 20001214 |
| AU 2001022625 | A | AU 2001-22625 | 20001214 |
| EP 1238077 | A1 | EP 2000-986374 | 20001214 |
| | | WO 2000-US33858 | 20001214 |
| US 2003077246 | A1 Provisional | US 1999-172306P | 19991216 |
| | Div ex | US 2000-724037 | 20001128 |
| | | US 2002-146574 | 20020515 |
| MX 2002006027 | A1 | WO 2000-US33858 | 20001214 |
| | | MX 2002-6027 | 20020617 |

Searcher : Shears 571-272-2528

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JP 2004500063 W

WO 2000-US33858

20001214

JP 2001-545549

20001214

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001022625 | A Based on | WO 2001044472 |
| EP 1238077 | A1 Based on | WO 2001044472 |
| MX 2002006027 | A1 Based on | WO 2001044472 |
| JP 2004500063 | W Based on | WO 2001044472 |

PRIORITY APPLN. INFO: US 1999-172306P 19991216; US
2000-724037 20001128; US
2002-146574 20020515

AN 2001-451665 [48] WPIDS

AB WO 200144472 A UPAB: 20010829

NOVELTY - An isolated molecule comprising a nucleotide sequence comprising a sequence encoding a novel TNFr/OPG-like polypeptide or the polypeptide is new.

DETAILED DESCRIPTION - An isolated nucleic acid molecule comprising a nucleic acid sequence selected from:

(a) (I) a 2638 base pair (bp) human nucleotide and (II) a 2479 bp murine sequence outlined in the specification;

(b) a nucleotide sequence encoding the 430 amino acid (aa) human polypeptide (III) and the 436 murine polypeptide (IV) outlined in the specification;

(c) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (I-IV). The encoded polypeptide has an activity of the polypeptides (III-IV); or

(d) a nucleotide sequence complementary to any of (I-IV) and (c).

INDEPENDENT CLAIMS are included for the following:

(1) a sequence selected from the following group of nucleotide sequences:

(a) which encode a polypeptide that is at least 70% identical to the polypeptide (III) or (IV). The polypeptide has an activity of the polypeptide (III) or (IV);

(b) which encode an allelic variant or splice variant of the nucleotide sequence (I) or (II). The encoded polypeptide has an activity of the polypeptide (III) or (IV);

(c) (I) or (II), 1(a) or (b) encoding a polypeptide fragment of at least 25 aa, where the polypeptide has an activity of the polypeptide (III) or (IV);

(d) (I) or (II), or 1(a)-(c) comprising a fragment of at least 16 nucleotides;

(e) which hybridizes under moderately or highly stringent conditions to the complement of any of 1(a)-(d), where the polypeptide has an activity of the polypeptide (III) or (IV);

(f) which is complementary to any of 1(a)-(c);

(2) a nucleic acid molecule selected from the following group of nucleotide sequences:

(a) which encode a polypeptide (III) or (IV) with at least one conservative aa substitution, where the polypeptide has an activity of the polypeptide (III) or (IV);

(b) which encodes a peptide (III) or (IV) with at least one

amino acid insertion, where the polypeptide has an activity of the polypeptide (III) or (IV);

(c) which encodes a peptide (III) or (IV) with at least one amino acid deletion where the polypeptide has an activity of the polypeptide (III) or (IV);

(d) which encodes a peptide (III) or (IV) which has a C- and/or N- terminal truncation, where the polypeptide has an activity of the polypeptide (III) or (IV);

(e) which encodes a peptide (III) or (IV) with at least one modification selected from the group consisting of amino acid substitutions, amino acid insertions, amino acid deletions, C-terminal truncation and N-terminal truncation where the polypeptide has an activity of the polypeptide (III) or (IV);

(f) which comprises a fragment of at least 16 nucleotides of 2(a)-(e);

(g) which hybridizes under moderately or highly stringent conditions to the complement of any (a)-(f), where the polypeptide has an activity of the polypeptide (III) or (IV);

(3) which is complementary to any of 2(a)-(e);

(4) a vector comprising a claimed nucleic acid molecule;

(5) a host cell comprising (4);

(6) a process of producing a TNFr/OPG-like polypeptide (T);

(7) the polypeptide of (6);

(8) a process for identifying candidate inhibitors of T polypeptide activity or production;

(9) a process for identifying candidate stimulators of T polypeptide activity or production;

(10) an isolated polypeptide comprising the amino acid sequence of (III) or (IV);

(11) an isolated polypeptide;

(12) an isolated polypeptide;

(13) an ortholog of (11) or (12) where the 56 aa polypeptide (V) given in the specification is encoded by a polynucleotide (sic);

(14) an isolated polypeptide of the invention, (1) and (2);

(15) an antibody produced by an animal after immunizing with (III) or (IV);

(16) an antibody or fragment of an antibody which binds to the peptide of (9) (10) or (11);

(17) a hybridoma that produces a monoclonal antibody that binds to a peptide of (III) or (IV);

(18) a selective binding agent or its fragment that specifically binds at least one polypeptide;

(19) a selective binding agent or its fragment comprising at least one complementary determining region with specificity for (III) or (IV);

(20) a selective binding agent produced by immunizing an animal with (III) and (IV);

(21) a hybridoma that produces a selective binding agent capable of binding a polypeptide of (10) (11) or (12);

(22) a polypeptide comprising a derivative of the polypeptide of (10) (11) or (12);

(23) a viral vector comprising a nucleic acid molecule of the invention, (1) and (2);

(24) a fusion polypeptide comprising the polypeptide of (10) (11) or (12) fused to a heterologous aa sequence;

(25) a device;

- (26) a device;
- (27) identifying antagonists of T biological activity comprising:
 - (a) contacting a small molecule compound with T and detecting the biological activity of T in its presence; and
 - (b) comparing the level of T in the presence and absence of the small molecule compound;
- (28) modulating levels of a polypeptide in an animal comprising administering to the animal the nucleic acid molecule of the invention, (1) and (2);
- (29) a T binding partner identified by the method of (28);
- (30) an antagonist of T activity selected from TNFr/OPG-like selective binding agents, small molecules, antisense oligonucleotides and peptides or derivatives of them which have specificity for;
- (31) reducing cellular production of T comprising transforming or transfecting cells with an antagonist of (3);
- (32) a transgenic non human mammal comprising a disruption of the nucleic acid molecule of the invention, (1) or (2);
- (33) a diagnostic reagent comprising a detectably labelled polynucleotide encoding the aa sequence encoded by (III) and (IV), or a fragment, variant or spliced variants.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Not given.

USE - The treatment, prevention or amelioration of a medical condition in a mammal resulting from decreased levels of T comprising administering (10) (11) or (12), or the polypeptide encoded by the nucleic acid of the invention, (1) or (2) is useful (claimed).

The detection or quantitating of T in a sample comprising contacting the sample with the anti T antibody or fragment and detecting the antibodies binding. Treatment, prevention or amelioration of a disease, condition or disorder associated with altered levels of T comprising administering (18) to a patient (claimed). The diagnosis of a pathological condition or susceptibility to it, caused by or resulting from abnormal levels of T (claimed).

Identification of a compound which binds to a peptide (claimed).

The identification of a polypeptide which binds to T using a yeast two-hybrid approach (claimed).

Determining the presence of TNFr/OPG-like nucleic acids (TNA), either DNA or RNA (claimed).

Detecting the presence of TNA, either DNA or RNA (claimed).

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L23 ANSWER 23 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2001-381694 [40] WPIDS
 DOC. NO. NON-CPI: N2001-279877
 DOC. NO. CPI: C2001-116982
 TITLE: Novel interferon-like polypeptides for preventing, treating or diagnosing, e.g., cancer, multiple sclerosis, autoimmune disease, diabetes, and human immunodeficiency virus.
 DERWENT CLASS: B04 D16 P14 S03
 INVENTOR(S): KELLEY, M; WELCHER, A; WEN, D; KELLY, M

10/602785

PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC
COUNTRY COUNT: 95
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 2001042474 | A2 | 20010614 | (200140)* | EN | 149 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2001019449 | A | 20010618 | (200161) | | |
| US 2002137137 | A1 | 20020926 | (200265) | | |
| EP 1240327 | A2 | 20020918 | (200269) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR | | | | | |
| JP 2003520579 | W | 20030708 | (200347) | | 312 |
| MX 2002005660 | A1 | 20020901 | (200370) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2001042474 | A2 | WO 2000-US32939 | 20001204 |
| AU 2001019449 | A | AU 2001-19449 | 20001204 |
| US 2002137137 | A1 Provisional | US 1999-169720P | 19991208 |
| | Div ex | US 2000-724860 | 20001128 |
| | | US 2001-927850 | 20010810 |
| EP 1240327 | A2 | EP 2000-982416 | 20001204 |
| | | WO 2000-US32939 | 20001204 |
| JP 2003520579 | W | WO 2000-US32939 | 20001204 |
| | | JP 2001-544347 | 20001204 |
| MX 2002005660 | A1 | WO 2000-US32939 | 20001204 |
| | | MX 2002-5660 | 20020607 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001019449 | A Based on | WO 2001042474 |
| EP 1240327 | A2 Based on | WO 2001042474 |
| JP 2003520579 | W Based on | WO 2001042474 |
| MX 2002005660 | A1 Based on | WO 2001042474 |

PRIORITY APPLN. INFO: US 2000-724860 20001128; US
1999-169720P 19991208; US
2001-927850 20010810

AN 2001-381694 [40] WPIDS

AB WO 200142474 A UPAB: 20020926

NOVELTY - An isolated Interferon-Like (IFN-L) polypeptide (I)-(III) having the activity of either one of the fully defined 191 (S1) or 207 (S2) amino acid sequences given in the specification, is new.

DETAILED DESCRIPTION - An isolated polypeptide (I) comprises

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the amino acid sequence selected from:

(a) the fully defined 168 (S3) or 178 (S4) amino acid sequences given in the specification, optionally further comprising an amino-terminal methionine;

(b) an amino acid sequence for an ortholog of either S1 or S2;

(c) an amino acid sequence at least 70% identical to and having the activity of S1 or S2;

(d) a fragment having the activity of sequence of S1 or S2 comprising at least 25 amino acid residues, or its antigenic; and

(e) an amino acid sequence for an allelic variant or splice variant of either S1 or S2, the amino acid sequence encoded by the DNA insert in ATCC deposit Number PTA-976 (S5), or any of (a)-(c).

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated polypeptide (II) comprising the amino acid sequence selected from:

(a) the amino acid sequence in either S1 or S2; and

(b) the amino acid sequence encoded by S5;

(2) an isolated polypeptide (III) comprising the amino acid sequence selected from:

(a) an amino acid sequence having the activity and sequence of S1 or S2 with either at least one conservative amino acid substitution, an insertion, a deletion, or a C- and/or N-terminal truncation; and

(b) an amino acid sequence having the activity and sequence of S1 or S2 with at least one modification selected from an amino acid substitution, insertion, deletion, or C- and/or N-terminal truncation;

(3) an isolated nucleic acid molecule (IV) comprising a nucleotide sequence selected from:

(a) a nucleotide sequence encoding a polypeptide having the activity and at least 70% identical to S1 or S2;

(b) a nucleotide sequence encoding an allelic variant or splice variant of the fully defined 913 (S6) or 1836 (S7) base pair sequence given in the specification, the nucleotide sequence of S5, or 3(a);

(c) a region of either S6, S7, S5, 3(a), or 3(b) encoding a polypeptide fragment of at least 25 amino acid residues, which has an activity of the encoded polypeptide of S1 or S2, or its antigenic;

(d) a region of either S6, S7, S5, 3(a)-(c) comprising a fragment of at least 16 nucleotides;

(e) a nucleotide sequence which hybridizes to the complement of any of 3(a)-(d); and

(f) a nucleotide sequence complementary to any of 3(a)-(d);

(4) an isolated nucleic acid molecule (V) comprising a nucleotide sequence selected from:

(a) the nucleotide sequence of either S6 or S7;

(b) the nucleotide sequence of S5;

(c) a nucleotide sequence encoding the polypeptide of S1 or S2;

(d) a nucleotide sequence which hybridizes to the complement of any of 4(a)-(c); and

(e) a nucleotide sequence complementary to any of 4(a)-(c);

(5) an isolated nucleic acid (VI) comprising a nucleotide sequence selected from:

(a) a nucleotide sequence encoding a polypeptide having the activity and sequence of S1 or S2 with either at least one

conservative amino acid substitution, an insertion, a deletion, or a C- and/or N-terminal truncation;

(b) a nucleotide sequence encoding a polypeptide having the activity and sequence of S1 or S2 with at least one modification selected from an amino acid substitution, insertion, deletion, or C- and/or N-terminal truncation;

(c) a nucleotide sequence of any of 5(a)-(b) comprising a fragment of at least 16 nucleotides;

(d) a nucleotide sequence which hybridizes to the complement of any of 5(a)-(c); and

(e) a nucleotide sequence complementary to any of 5(a)-(b);

(6) a vector (VII) comprising any of (IV)-(VI);

(7) a host cell (VIII) comprising (VII);

(8) a process (P1) for producing an IFN-L polypeptide (I)-(III);

(9) a process (P2) for determining whether a compound inhibits the activity of (I)-(III) or its production comprising exposing (VIII) to the compound and measuring the activity or the production of (I)-(III);

(10) a selective binding agent (IX) or its fragment which specifically binds to any of (I)-(III), produced by immunizing an animal with a polypeptide comprising (S1) or (S2);

(11) a hybridoma (X) which produces (IX) capable of binding (I)-(III);

(12) a polypeptide (XI) comprising a derivative of (I)-(III);

(13) a viral vector (XII) comprising (IV)-(VI);

(14) a fusion polypeptide (XIII) comprising (I)-(III) fused to a heterologous amino acid sequence;

(15) a method (M1) of diagnosing a pathological condition or a susceptibility to a pathological condition comprising:

(a) determining the presence or amount of expression of

(I)-(III), or the polypeptide encoded by (IV)-(VI) in a sample, and

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide;

(16) a device, comprising:

(a) a membrane suitable for implantation; and

(b) cells encapsulated within the membrane that secrete any one of (I)-(III); where the membrane is permeable to the protein and impermeable to materials detrimental to the cells;

(17) a method (M2) of identifying a compound which binds to an IFN-L polypeptide comprising:

(a) contacting (I)-(III) with a compound; and

(b) determining the extent of binding of (I)-(III) to the compound;

(18) a transgenic non-human mammal (XIV) comprising any one of (IV)-(VI); and

(19) a process (P3) for determining whether a compound inhibits the activity of production of (I)-(III) comprising exposing (XIV) to the compound, and measuring the activity or production of (I)-(III).

ACTIVITY - Cytostatic; immunomodulator; neuroprotective; antirheumatic; antiarthritic; antiinflammatory; osteopathic; immunosuppressive; dermatological; antidiabetic; virucide; hepatotropic; anti-HIV; antiarteriosclerosis.

No supporting data given.

MECHANISM OF ACTION - Interferon-like polypeptide; gene

therapy.

No supporting data given.

USE - The IFN-L polypeptide (I)-(III) may be used as an immunomodulator based on its homology to known interferons and as an immunogen.

Nucleic acid molecules (IV)-(VI) may be used to map the locations of the IFN-L gene and related genes on chromosomes. They may be useful as hybridization probes in diagnostic assays, as antisense molecules to inhibit the activity of the polypeptides, or used in gene therapy to create dominant negative inhibitors of one or more IFN-L polypeptides.

Furthermore, the polypeptides, polynucleotides, and their associated selective binding agents, e.g., antibodies may be used to prevent, treat, or diagnose a number of diseases and disorders such as cancer, multiple sclerosis, rheumatoid arthritis, inflammatory arthritis, osteoarthritis, inflammatory joint disease, autoimmune disease, diabetes, inflammatory bowel disease, transplant rejection, hepatitis, human immunodeficiency virus, human papilloma virus, osteoporosis and arteriosclerosis.

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L23 ANSWER 24 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2001-226743 [23] WPIDS
 DOC. NO. CPI: C2001-067718
 TITLE: Novel isolated fibroblast growth factor-like polypeptide useful for treating, preventing or ameliorating cirrhosis, inflammatory bowel disease, mucositis, Crohn's disease, diabetes, obesity, stroke and osteoporosis.
 DERWENT CLASS: A96 B04 D16
 INVENTOR(S): DANILENKO, D M; LIU, B; THOMASON, A R
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC
 COUNTRY COUNT: 95
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 2001018172 | A2 | 20010315 | (200123)* | EN | 137 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2000073500 | A | 20010410 | (200137) | | |
| EP 1218509 | A2 | 20020703 | (200251) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI | | | | | |
| JP 2003521893 | W | 20030722 | (200350) | | 252 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|-----------------|----------|
| WO 2001018172 | A2 | WO 2000-US24373 | 20000905 |

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| | | | |
|---------------|----|-----------------|----------|
| AU 2000073500 | A | AU 2000-73500 | 20000905 |
| EP 1218509 | A2 | EP 2000-961560 | 20000905 |
| | | WO 2000-US24373 | 20000905 |
| JP 2003521893 | W | WO 2000-US24373 | 20000905 |
| | | JP 2001-522384 | 20000905 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2000073500 | A Based on | WO 2001018172 |
| EP 1218509 | A2 Based on | WO 2001018172 |
| JP 2003521893 | W Based on | WO 2001018172 |

PRIORITY APPLN. INFO: US 2000-644052 20000823; US
1999-391861 19990907

AN 2001-226743 [23] WPIDS

AB WO 200118172 A UPAB: 20010425

NOVELTY - An isolated fibroblast growth factor-like (FGF-like) polypeptide (I) comprising a sequence (S1) with 209 or 210 amino acids fully defined in the specification or encoded by the DNA insert of ATCC Deposit No. PTA-626, is new.

DETAILED DESCRIPTION - (I) Comprises an amino acid sequence selected from:

(a) a sequence comprising 181 amino acids fully defined in the specification, optionally further comprising an amino-terminal methionine;

(b) a sequence for an analog of S1, where the encoded polypeptide:

(i) activates one or more FGF receptors;
(ii) regulates the growth and differentiation of cells within the liver or pancreas;
(iii) regulates other cell types following secretion from the liver or pancreas;

(iv) plays a role in liver or pancreas chemotaxis; or
(v) has an oncogenic activity;

(c) a sequence that is at least about 80% identical to S1;

(d) a fragment of S1 comprising at least about 25 amino acid residues, where the encoded polypeptide serves as an antigen for generating antibodies;

(e) a sequence for an allelic variant or splice variant of S1, the sequence encoded by the DNA insert of ATCC Deposit No. PTA-626, or the sequences of (a), (b) or (c); and

(f) a sequence S1 with at least one modification selected from conservative amino acid substitution, insertion, deletion, and C- and/or N- terminal truncation.

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid molecule (II) comprising a nucleotide sequence selected from:

(a) a sequence (S2) comprising 1190 or 649 base pairs fully defined in the specification;

(b) a sequence of the DNA insert in ATCC Deposit Number PTA-626;

(c) a sequence encoding S1;

(d) a sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (a)-(c);

(e) a sequence complementary to any of (a)-(c);

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- (f) a sequence encoding a polypeptide that is at least about 80% identical to S1;
- (g) a sequence encoding an allelic variant or splice variant of (S2), or (f);
- (h) a region of the nucleotide sequence of S2, (f), or (g) encoding a polypeptide fragment of at least about 25 amino acid residues;
- (i) a sequence encoding a polypeptide comprising 209 amino acids fully defined in the specification, with at least one modification selected from conservative amino acid substitution, insertion, amino acid deletion, and carboxyl- and/or amino-terminal truncation;
- (j) a region of the nucleotide sequence of S1, or any of (f)-(i) comprising a fragment of at least about 16 nucleotides;
- (k) a sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (f)-(j); and
- (1) a sequence complementary to any of (f)-(j);
- (2) a vector (III) comprising (II);
- (3) a host cell (IV) comprising (III);
- (4) production of (I);
- (5) a polypeptide produced by the above mentioned method;
- (6) an isolated polypeptide encoded by (II);
- (7) an antibody (V) produced by immunizing an animal with a peptide comprising S1;
- (8) an antibody (VI) or its fragment that specifically binds to (I);
- (9) a hybridoma (VII) that produces a monoclonal antibody that binds to a peptide comprising S1;
- (10) a composition (IX) comprising (I) and a formulation agent;
- (11) a polypeptide (X) comprising a derivative of (I);
- (12) a fusion polypeptide (XI) comprising (I) fused to a heterologous amino acid sequence;
- (13) a device (XII), comprising a membrane suitable for implantation, and cells encapsulated within the membrane, where the cells secrete (I) and the membrane is permeable to the protein product and impermeable to material detrimental to the cells;
- (14) identifying (M1) a compound which binds to (I) involves contacting (I) with the compound, and determining the extent of binding of (I) to the compound;
- (15) a transgenic non-human mammal (XIII) comprising (II);
- (16) determining (M2) whether a compound inhibits activity or production of (I) involves exposing (IV) or (XIII) to the compound and measuring activity or production of (I), in (IV) or (XIII); and
- (17) diagnosing (M3) a pathological condition or a susceptibility to a pathological condition in a subject involves determining the presence or amount of expression of (I) or the polypeptide encoded by (II) in a sample, and diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide.

ACTIVITY - Nootropic; neuroprotective; antiinflammatory; antidiabetic; anorectic; vulnerary; osteopathic; antiarthritic; antitumor; hepatotropic; antidiabetic; cerebroprotective; antiatherosclerotic; antilipemic; cytostatic; antiparkinsonian.

MECHANISM OF ACTION - Gene therapy; modulator of (I); activator of FGF receptor; regulator of growth and differentiation of cells

within the liver or pancreas; regulator of other cell types following secretion from the liver or pancreas.

No supporting data is given.

USE - (I), the polypeptide encoded by (II) and their agonists or antagonists are useful for modulating body growth or maturation or life-span, and for treating, preventing or ameliorating cirrhosis or other toxic insult of the liver, inflammatory bowel disease, mucositis, Crohn's disease, gastrointestinal abnormality, diabetes, obesity, neurodegenerative diseases, wounds, damage to the corneal epithelium, lens, or retinal tissue, damage to renal tubules as a result of acute tubular necrosis, hematopoietic cell reconstitution following chemotherapy, wasting syndromes (e.g., cancer associated cachexia), multiple sclerosis, myopathies, short stature, delayed maturation, excessive growth (for e.g. acromegaly), premature maturation, alopecia, diseases or abnormalities of androgen target organs, infantile respiratory distress syndrome, bronchopulmonary dysplasia, acute respiratory distress syndrome, or other lung abnormalities, tumors of the eye or other tissues, atherosclerosis, hypercholesterolemia, diabetes, obesity, stroke, osteoporosis, osteoarthritis, degenerative joint disease, muscle atrophy, sarcopenia, decreased lean body mass, baldness, wrinkles, increased fatigue, decreased stamina, decreased cardiac function, immune system dysfunction, cancer, Parkinson's disease, senile dementia, Alzheimer's disease, and decreased cognitive function.

(II) is useful for modulating levels of a polypeptide in an animal.

(V), (VI) or their fragments are useful for detecting or quantifying the amount of (I) (all claimed).

(I) is useful for preparing antibodies that bind to (I).

(II) is useful for mapping the locations of FGF-like gene and related genes on chromosomes, as anti-sense inhibitors of (I), for gene therapy and as hybridization probes in diagnostic assays, to test, either qualitatively or quantitatively, for the presence of FGF-like DNA or corresponding RNA in mammalian tissue or bodily fluid samples.

(V) or (VI) is useful for in vivo imaging and as therapeutics.

(XIII) is useful for drug candidate screening.

Dwg.0/4

L23 ANSWER 25 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2001-202772 [20] WPIDS
 DOC. NO. NON-CPI: N2001-144678
 DOC. NO. CPI: C2001-060209
 TITLE: Nucleic acid encoding a novel member of the tumor necrosis ligand supergene family, designated Fhm, useful for treating, preventing and diagnosing anemia and cancer.
 DERWENT CLASS: A96 B04 D16 S03
 INVENTOR(S): BOYLE, W J; HSU, H; WOODEN, S K
 PATENT ASSIGNEE(S): (AMGE-N) AMGEN INC; (BOYL-I) BOYLE W J; (HSUH-I) HSU H; (WOOD-I) WOODEN S K
 COUNTRY COUNT: 95
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|-----------|------|------|------|----|----|
| ----- | | | | | |

10/602785

WO 2001011050 A1 20010215 (200120)* EN 143
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC
MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN
YU ZA ZW
AU 2001028071 A 20010305 (200130)
EP 1210435 A1 20020605 (200238) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK
NL PT RO SE SI
JP 2003506088 W 20030218 (200315) 173
US 6521422 B1 20030218 (200317)
US 2003129706 A1 20030710 (200347)
MX 2002001264 A1 20030701 (200366)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2001011050 | A1 | WO 2000-US21284 | 20000803 |
| AU 2001028071 | A | AU 2001-28071 | 20000803 |
| EP 1210435 | A1 | EP 2000-982731 | 20000803 |
| | | WO 2000-US21284 | 20000803 |
| JP 2003506088 | W | WO 2000-US21284 | 20000803 |
| | | JP 2001-515835 | 20000803 |
| US 6521422 | B1 Provisional | US 1999-147294P | 19990804 |
| | | US 2000-632287 | 20000803 |
| US 2003129706 | A1 Provisional | US 1999-147294P | 19990804 |
| | Div ex | US 2000-632287 | 20000803 |
| | | US 2002-286696 | 20021101 |
| MX 2002001264 | A1 | WO 2000-US21284 | 20000803 |
| | | MX 2002-1264 | 20020204 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2001028071 | A Based on | WO 2001011050 |
| EP 1210435 | A1 Based on | WO 2001011050 |
| JP 2003506088 | W Based on | WO 2001011050 |
| MX 2002001264 | A1 Based on | WO 2001011050 |

PRIORITY APPLN. INFO: US 1999-147294P 19990804; US
2000-632287 20000803; US
2002-286696 20021101

AN 2001-202772 [20] WPIDS

AB WO 200111050 A UPAB: 20010410

NOVELTY - A nucleic acid (N1) encoding a novel member of the tumor necrosis ligand (TNF) supergene family, designated Fhm, is new.

DETAILED DESCRIPTION - A nucleic acid (N1) encoding a novel member of the tumor necrosis ligand (TNF) supergene family, designated Fhm, is new.

N1 comprises a sequence selected from:

(a) the 819 nucleotide sequence (I) defined in the

Searcher : Shears 571-272-2528

specification;

(b) a nucleotide sequence encoding the 251 amino acid sequence (II) defined in the specification;

(c) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (a) or (b), where the encoded polypeptide has the activity of (II);

(d) a nucleotide sequence complementary to any of (a)-(c);

(e) a nucleotide sequence encoding a polypeptide that is at least about 70 percent identical to (II), where the polypeptide has the activity of (II);

(f) a nucleotide sequence encoding an allelic variant or splice variant of (I), where the encoded polypeptide has the activity of (II);

(g) a nucleotide sequence of (I), or the nucleic acid of (e) or (f) encoding a polypeptide fragment of at least 25 amino acid residues, where the polypeptide has the activity of (II);

(h) a nucleotide sequence of (I), or the nucleic acid of (e), (f) or (g) comprising a fragment of at least 16 nucleotides;

(i) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (e)-(h), where the polypeptide has the activity of (II);

(j) a nucleotide sequence complementary to any of (e)-(g);

(k) a nucleotide sequence encoding (II) with at least one conservative amino acid substitution, insertion, deletion, or a C- and/or N- terminal truncation, where the polypeptide has the activity of (II);

(l) a nucleotide sequence of (k) comprising a fragment of at least about 16 nucleotides;

(m) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (k)-(l), where the polypeptide has the activity of (II); or

(n) a nucleotide sequence complementary to (k).

INDEPENDENT CLAIMS are also included for the following:

(1) a vector comprising N1;

(2) a host cell comprising the vector of (1);

(3) a method (M1) of producing a Fhm polypeptide comprising culturing the host cell of (2);

(4) a polypeptide produced by the process of (3);

(5) a process for identifying candidate inhibitors or stimulators of Fhm polypeptide activity or production;

(6) an isolated polypeptide (P1) comprising the amino acid sequence of (II);

(7) an isolated polypeptide (P2) comprising the amino acid sequence selected from:

(a) the mature amino acid sequence of (II), comprising a mature amino terminus at residue 1, optionally further comprising an amino-terminal methionine;

(b) an amino acid sequence for an ortholog of (II), where the encoded polypeptide has an activity of (II);

(c) an amino acid sequence that is at least 70 percent identical to the amino acid sequence of (II), where the polypeptide has an activity of (II);

(d) a fragment of (II) comprising at least 25 amino acid residues, where the polypeptide has an activity of (II);

(e) an amino acid sequence for an allelic variant or splice variant of either (II), or at least one of (a)-(c) where the

polypeptide has an activity of (II); or

(f) the amino acid sequence of (II) with at least one conservative amino acid substitution, insertion, deletion, or a C- and/or N-terminal truncation, where the polypeptide has an activity of (II);

(8) an isolated polypeptide encoded by N1;

(9) an antibody produced by immunizing an animal with a peptide comprising the sequence of (II);

(10) a monoclonal antibody or its fragment that specifically binds P1 or P2;

(11) a hybridoma that produces a monoclonal antibody that binds to a peptide comprising the sequence of (II);

(12) a method of detecting or quantitating the amount of Fhm in a sample;

(13) a selective binding agent (A1) or its fragment that specifically binds at least one polypeptide;

(14) a selective binding agent (A2) or its fragment comprising at least one complementarity determining region (CDR) with specificity for (II);

(15) a method for treating, preventing, or ameliorating a disease, condition, or disorder, comprising administering to an effective amount of A1;

(16) a selective binding agent produced by immunizing an animal with a polypeptide comprising (II);

(17) a hybridoma that produces a selective binding agent capable of binding P1 or P2;

(18) a polypeptide (P3) comprising a derivative of P1 or P2;

(19) a viral vector comprising N1;

(20) a fusion polypeptide (P4) comprising P1 or P2 fused to a heterologous amino acid sequence;

(21) a method for treating, preventing or ameliorating a medical condition in a mammal resulting from decreased levels of Fhm polypeptide, comprising administering P1, P2 or the polypeptide encoded by N1 to the mammal;

(22) a method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject caused by or resulting from abnormal levels of Fhm polypeptide;

(23) a device, comprising cells that secrete P1 or P2, or the Fhm polypeptide;

(24) a method of identifying a compound which binds to a polypeptide;

(25) a method of modulating levels of a polypeptide in an animal, comprising administering N1 to the animal;

(26) a transgenic non-human mammal comprising N1;

(27) a diagnostic reagent comprising a detectably labeled polynucleotide (II), or its fragment, variant or homolog including its allelic variants and spliced variants;

(28) a method (M2) for determine the presence of Fhm nucleic acids in a biological sample;

(29) a method (M3) for detecting the presence of Fhm nucleic acids in a tissue or cellular sample; and

(30) an antagonist of Fhm polypeptide activity.

ACTIVITY - Antiviral; antianemic; immunosuppressive; cytostatic; antimalarial; antidiabetic; cardiant; antibacterial; anorectic.

No biological data given.

MECHANISM OF ACTION - Fhm antagonist; gene therapy.

USE - The Fhm polypeptide and nucleic acid molecules may be used to treat, prevent, ameliorate, diagnose and/or detect TNF-related diseases, e.g. acquired-immunodeficiency syndrome (AIDS), anemia, autoimmune diseases, cachexia, cancer, cerebral malaria, diabetes mellitus, erythroid sick syndrome, hepatitis, insulin resistance, leprosy, leukemia, lymphoma, meningitis, multiple sclerosis, myocardial ischaemia, obesity, rejection of transplanted organs, rheumatoid arthritis, septic shock syndrome, stroke, adult respiratory distress syndrome and tuberculosis.
Dwg.0/2

L23 ANSWER 26 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2001-007002 [01] WPIDS
 DOC. NO. CPI: C2001-001676
 TITLE: Novel adhesive modulatory peptides useful for modulating adhesion of target cells such as endothelial cells, fibroblasts, macrophages to substrate such as polyvinyl surfaces, collagen.
 DERWENT CLASS: B04
 INVENTOR(S): ASHKAR, S
 PATENT ASSIGNEE(S): (CHIL-N) CHILDRENS MEDICAL CENT; (ASHK-I) ASHKAR S
 COUNTRY COUNT: 93
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|----|
| WO 2000063236 | A2 | 20001026 | (200101)* | EN | 35 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2000043568 | A | 20001102 | (200107) | | |
| EP 1173469 | A2 | 20020123 | (200214) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI | | | | | |
| BR 2000009804 | A | 20020416 | (200234) | | |
| US 2002058336 | A1 | 20020516 | (200237) | | |
| JP 2003502019 | W | 20030121 | (200308) | | 46 |
| MX 2001010404 | A1 | 20030701 | (200420) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2000063236 | A2 | WO 2000-US10329 | 20000417 |
| AU 2000043568 | A | AU 2000-43568 | 20000417 |
| EP 1173469 | A2 | EP 2000-923447 | 20000417 |
| | | WO 2000-US10329 | 20000417 |
| BR 2000009804 | A | BR 2000-9804 | 20000417 |
| | | WO 2000-US10329 | 20000417 |
| US 2002058336 | A1 Provisional | US 1999-129709P | 19990416 |
| | | US 2000-732411 | 20001207 |

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| | | | |
|---------------|----|-----------------|----------|
| JP 2003502019 | W | JP 2000-612326 | 20000417 |
| | | WO 2000-US10329 | 20000417 |
| MX 2001010404 | A1 | WO 2000-US10329 | 20000417 |
| | | MX 2001-10404 | 20011015 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2000043568 | A Based on | WO 2000063236 |
| EP 1173469 | A2 Based on | WO 2000063236 |
| BR 2000009804 | A Based on | WO 2000063236 |
| JP 2003502019 | W Based on | WO 2000063236 |
| MX 2001010404 | A1 Based on | WO 2000063236 |

PRIORITY APPLIN. INFO: US 1999-129709P 19990416

AN 2001-007002 [01] WPIDS

AB WO 200063236 A UPAB: 20011129

NOVELTY - An adhesive modulatory peptide (I) which modulates adhesion of a target cell to a substrate, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a substrate treated with (I);
- (2) a **device** treated with (I);
- (3) a composition comprising (I) for in vivo use;
- (4) analogs, fragments and chemical derivatives of (I); and
- (5) a **device** for modulation of adhesion of a target cell comprising a substrate in combination with (I), forming a **device** for modulating adhesion.

ACTIVITY - Cytostatic; Vulnerary; Antibacterial.

MECHANISM OF ACTION - Modulator of target cell adhesion to a substrate. No supporting data is given.

USE - (I) is useful for modulating adhesion of target cells such as endothelial cells, fibroblasts, macrophages, neutrophils or myofibroblasts within a subject to a substrate e.g., polyvinyl surface, gel, collagen, hyaluronic acid, titanium and PGA. The substrate is contacted with the peptide, forming the adhesion-modulatory peptide-associated substrate prior to providing the cell with the substrate (claimed). (I) is useful for regulating vessel growth during wound healing and/or in the treatment of damage resulting from vascular disease, for inhibiting or preventing cellular apoptosis, in the treatment of fibrosis, in particular in the clearing of debris, to minimize wound contraction resulting in reduced keloid tissue formation and scarring and as anti clotting agents. The peptides also have **immunomodulatory** effects, anti-cancer effects (by competing for alpha v beta 3 integrin binding on the cell surface), anti-bacterial (by adhering to neutrophils) and anti-tumorigenic effects (by having anti-CD44 activity). Also they are useful for stimulating and/or enhancing cell attachment to polymer **scaffolds**, to enhance tissue growth and for coating medical **devices**, including prostheses or implants for example vascular implants.

Dwg.0/0

L23 ANSWER 27 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-256988 [22] WPIDS

Searcher : Shears 571-272-2528

10/602785

DOC. NO. CPI: C2000-078557
 TITLE: Attenuated gram-negative Salmonella cells,
 comprising inactivated genes in the SPI2 locus and
 useful for vaccinating against a range of disorders
 associated with microbial infections such as
 stomach and cervical cancers.
 DERWENT CLASS: B04 D16
 INVENTOR(S): APFEL, H; GUZM, N C A; HENSEL, M; HUECK, C; MEDINA,
 E; GUZMAN, C A
 PATENT ASSIGNEE(S): (CREA-N) CREATOGEN BIOSCIENCES GMBH; (CREA-N)
 CREATOGEN AG
 COUNTRY COUNT: 89
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 2000014240 | A2 | 20000316 | (200022)* | EN | 147 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW NL OA PT SD SE SL SZ UG ZW | | | | | |
| W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM | | | | | |
| EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ | | | | | |
| LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD | | | | | |
| SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW | | | | | |
| AU 9958605 | A | 20000327 | (200032) | | |
| EP 1108034 | A2 | 20010620 | (200135) | EN | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK | | | | | |
| NL PT RO SE SI | | | | | |
| BR 9914479 | A | 20010626 | (200140) | | |
| JP 2002524077 | W | 20020806 | (200266) | | 181 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|----------------|----------|
| WO 2000014240 | A2 | WO 1999-EP6514 | 19990903 |
| AU 9958605 | A | AU 1999-58605 | 19990903 |
| EP 1108034 | A2 | EP 1999-946122 | 19990903 |
| | | WO 1999-EP6514 | 19990903 |
| BR 9914479 | A | BR 1999-14479 | 19990903 |
| | | WO 1999-EP6514 | 19990903 |
| JP 2002524077 | W | WO 1999-EP6514 | 19990903 |
| | | JP 2000-568983 | 19990903 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 9958605 | A Based on | WO 2000014240 |
| EP 1108034 | A2 Based on | WO 2000014240 |
| BR 9914479 | A Based on | WO 2000014240 |
| JP 2002524077 | W Based on | WO 2000014240 |

PRIORITY APPLN. INFO: EP 1998-116827 19980904
 AN 2000-256988 [22] WPIDS
 AB WO 200014240 A UPAB: 20000508
 NOVELTY - Attenuated gram-negative cells (HCl), especially

Searcher : Shears 571-272-2528

Salmonella, in which at least 1 gene in the SPI2 locus has been inactivated resulting in attenuation/reduction of virulence compared to the wild type cell, are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) an isolated nucleic acid molecule (NAM1) comprising at least 50 nucleotides:
 - (a) of 2 defined nucleic acid sequences ((I) and (II));
 - (b) of an allele of (I) and/or (II); or
 - (c) of a nucleic acid sequence which hybridizes under stringent conditions to (I) and/or (II);
- (2) a recombinant vector (VEC1) comprising NAM1;
- (3) a host cell (HC1) comprising either NAM1 or VEC1;
- (4) a polypeptide (PEP1) comprising:
 - (a) one of 17 defined amino acid sequences ((XXI) - (XXXVII)) given in the specification; or
 - (b) a sequence 60% homologous to (XXI) - (XXXVII);
- (5) an antibody directed against PEP1;
- (6) a fusion protein (PEP2) comprising PEP1, which has been inserted, deletion-inserted or fused C- or NH2-terminally with at least one heterologous peptide;
- (7) a composition comprising HC1 and an adjuvant;
- (8) a method (A) for producing a living vaccine (i.e. HC1), comprising providing a living gram negative cell comprising the SPI2 locus and inactivating at least 1 gene of the locus to obtain attenuated HC1 cells;
- (9) a method for the detection of attenuated cells (i.e. HC1) comprising providing a sample containing the cell and detecting a property not present in the wild type cells;
- (10) a method (B) for establishing a library of attenuated gram-negative cells for the presentation of an antigen to a host, comprising obtaining at least 2 attenuated gram-negative cells (i.e. HC1), determining the pathogenicities of the cells and determining the relation of those pathogenicities;
- (11) the use of the SPI2 locus, NAM1 and VEC1 for the preparation of HC1 for the presentation of an antigen to a cell; and
- (12) an isolated nucleic acid molecule (NAM2) comprising at least 100 nucleotides:
 - (a) of 2 defined nucleic acid sequences ((XXVIII) and (IXXX));

or

- (b) of a nucleic acid sequence which hybridizes under stringent conditions to (XXVIII) and/or (IXXX).

ACTIVITY - Cytostatic; anti-arteriosclerotic; anti-Alzheimer's; virucide; hepatotropic; antiinflammatory; bactericide.

MECHANISM OF ACTION - Vaccine.

The presence of beta -galactosidase (beta -gal) (which acted as an antigen) specific antibodies in intestinal washes from mice immunized with MvP101 or MvP103 (sseC::aphT and sseD::aphT mutant Salmonella typhimurium strains) carrying pAH97 was investigated 52 days after immunization. It was found that both carriers stimulated the production of significant amounts of beta -gal-specific immunoglobulin (Ig) A and to a lesser extent, favored the transudation of antigen-specific IgG in the intestinal lumen. Immunization with MvP103/pAH97 resulted in 4% of the total Ig obtained from intestinal lavages being IgA specific for beta -gal

and 0.25% of the Ig was IgB specific for beta -gal. Immunization with MvP101/pAH97 resulted in 4.25% of the total Ig obtained from intestinal lavages being IgA specific for beta -gal and 1% of the Ig was IgB specific for beta -gal. No significant differences were observed among the mucosal responses to the different recombinant clones.

USE - The attenuate cells are used as carriers for presenting bacterial, viral or tumor antigens to a host and are capable of expressing the nucleic acid molecules in a target cell, especially a macrophage (claimed). Therefore, the cells may be used for the preparation of a prophylactic or therapeutic composition for the treatment of a chronic disease caused by a bacterium or virus (claimed). Preferably, the disease is either a Salmonella infection or a tumor. The cells may therefore be used to vaccinate against a range of bacterial and viral pathogens such as Helicobacter pylori (directly associated with stomach cancer), Chlamydia pneumoniae (associated with arteriosclerosis and Alzheimer's disease), Borrelia burgdorferi, Nanobacteria (found in the chronically diseased kidneys of patients with crystalline deposits), Hepatitis virus (causative agent of Hepatitis B and C and associated with liver cancer), Human papilloma virus (HPV) (associated with cervical cancer) or Hepes virus (claimed). The nucleic acids may also be used for the detection of in vivo inducible promoters.

Dwg.0/20

L23 ANSWER 28 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 1999-601290 [51] WPIDS
 CROSS REFERENCE: 1997-212604 [19]; 1997-212661 [19]
 DOC. NO. CPI: C1999-174989
 TITLE: Inhibiting immune response of patient against transplanted cells.
 DERWENT CLASS: B04 C06 D16
 INVENTOR(S): HAGLER, M K; KAPP, J A; LINSLEY, P S; SAFELY, S A; WEBER, C J; SAFLEY, S A
 PATENT ASSIGNEE(S): (BRIM) BRISTOL-MYERS SQUIBB CO; (UYEM-N) UNIV EMORY; (HAGL-I) HAGLER M K; (KAPP-I) KAPP J A; (LINS-I) LINSLEY P S; (SAFL-I) SAFLEY S A; (WEBE-I) WEBER C J
 COUNTRY COUNT: 23
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|-----|
| WO 9949734 | A1 | 19991007 | (199951)* | EN | 156 |
| RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE | | | | | |
| W: AU CA JP | | | | | |
| AU 9932067 | A | 19991018 | (200010) | | |
| EP 984699 | A1 | 20000315 | (200018) | EN | |
| R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE | | | | | |
| JP 2002501548 | W | 20020115 | (200207) | | 141 |
| US 2004047890 | A1 | 20040311 | (200419) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-----------|------|-------------|------|
| ----- | | | |

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| | | | |
|---------------|----------------|-----------------|----------|
| WO 9949734 | A1 | WO 1999-US6630 | 19990326 |
| AU 9932067 | A | AU 1999-32067 | 19990326 |
| EP 984699 | A1 | EP 1999-914166 | 19990326 |
| | | WO 1999-US6630 | 19990326 |
| JP 2002501548 | W | JP 1999-549567 | 19990326 |
| | | WO 1999-US6630 | 19990326 |
| US 2004047890 | A1 Provisional | US 1995-4375P | 19950927 |
| | CIP of | WO 1996-US15577 | 19960927 |
| | | US 1998-49865 | 19980327 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|------------|
| AU 9932067 | A Based on | WO 9949734 |
| EP 984699 | A1 Based on | WO 9949734 |
| JP 2002501548 | W Based on | WO 9949734 |

PRIORITY APPLN. INFO: US 1998-49865 19980327; US
1995-4375P 19950927; WO
1996-US15577 19960927

AN 1999-601290 [51] WPIDS
CR 1997-212604 [19]; 1997-212661 [19]
AB WO 9949734 A UPAB: 20040318

NOVELTY - Inhibiting then destruction of viable transplanted cells, by the subject's immune system, comprises placing the cells, or tissue within a **device** comprising a semipermeable membrane, prior to transplantation and treating the subject with a substance which inhibits an **immune-system co-stimulation** event, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of treating diabetes in a subject, comprising:

(a) placing viable insulin-producing **cells** or tissue within a **device** comprising a semipermeable membrane so as to **obtain** contained viable insulin-producing **cells**

;

(b) transplanting the **cells obtained** in step (a) into a subject; and

(c) treating the subject with a substance which inhibits an **immune-system co-stimulation** event so that the subject's immune system is prevented from responding to the transplanted cells.

ACTIVITY - **Immunomodulatory**; antidiabetic.

MECHANISM OF ACTION - None given.

USE - The methods are useful for treating graft vs. host disease, especially in treating patients with diabetes mellitus by a transplant of insulin producing cells.

Dwg.0/58

L23 ANSWER 29 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-012999 [01] WPIDS
DOC. NO. CPI: C2000-002384
TITLE: **Modulating the immune response**
in a mammal to an antigen.
DERWENT CLASS: A96 B07 D16
INVENTOR(S): CERAMI, A; CERAMI, C; DOVE, D; GELBER, C; DAVID, D

Searcher : Shears 571-272-2528

10/602785

PATENT ASSIGNEE(S): (VACC-N) APPLIED VACCINE TECHNOLOGIES CORP
 COUNTRY COUNT: 85
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|----|
| WO 9944583 | A2 | 19990910 | (200001)* | EN | 75 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC | | | | | |
| MW NL OA PT SD SE SL SZ UG ZW | | | | | |
| W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI | | | | | |
| GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR | | | | | |
| LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI | | | | | |
| SK SL TJ TM TR TT UA UG US UZ VN YU ZW | | | | | |
| AU 9930667 | A | 19990920 | (200007) | | |
| NO 2000004349 | A | 20001030 | (200063) | | |
| BR 9908466 | A | 20001205 | (200101) | | |
| EP 1066028 | A2 | 20010110 | (200103) | EN | |
| R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT RO SE | | | | | |
| CZ 2000003206 | A3 | 20010711 | (200147) | | |
| HU 2001001076 | A2 | 20010828 | (200157) | | |
| CN 1299272 | A | 20010613 | (200158) | | |
| KR 2001041528 | A | 20010525 | (200168) | | |
| MX 2000008532 | A1 | 20011101 | (200279) | | |
| AU 756951 | B | 20030130 | (200319) | | |
| JP 2003523308 | W | 20030805 | (200353) | | 84 |
| RU 2225197 | C2 | 20040310 | (200428) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|----------------|----------|
| WO 9944583 | A2 | WO 1999-US4637 | 19990302 |
| AU 9930667 | A | AU 1999-30667 | 19990302 |
| NO 2000004349 | A | WO 1999-US4637 | 19990302 |
| | | NO 2000-4349 | 20000901 |
| BR 9908466 | A | BR 1999-8466 | 19990302 |
| | | WO 1999-US4637 | 19990302 |
| EP 1066028 | A2 | EP 1999-912252 | 19990302 |
| | | WO 1999-US4637 | 19990302 |
| CZ 2000003206 | A3 | WO 1999-US4637 | 19990302 |
| | | CZ 2000-3206 | 19990302 |
| HU 2001001076 | A2 | WO 1999-US4637 | 19990302 |
| | | HU 2001-1076 | 19990302 |
| CN 1299272 | A | CN 1999-805765 | 19990302 |
| KR 2001041528 | A | KR 2000-709699 | 20000902 |
| MX 2000008532 | A1 | MX 2000-8532 | 20000831 |
| AU 756951 | B | AU 1999-30667 | 19990302 |
| JP 2003523308 | W | WO 1999-US4637 | 19990302 |
| | | JP 2000-534186 | 19990302 |
| RU 2225197 | C2 | WO 1999-US4637 | 19990302 |
| | | RU 2000-124880 | 19990302 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|-----------|------|-----------|
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Searcher : Shears 571-272-2528

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|---------------|------------------------------|--------------------------|
| AU 9930667 | A Based on | WO 9944583 |
| BR 9908466 | A Based on | WO 9944583 |
| EP 1066028 | A2 Based on | WO 9944583 |
| CZ 2000003206 | A3 Based on | WO 9944583 |
| HU 2001001076 | A2 Based on | WO 9944583 |
| AU 756951 | B Previous Publ. Based on | AU 9930667 WO 9944583 |
| JP 2003523308 | W Based on | WO 9944583 |
| RU 2225197 | C2 Based on | WO 9944583 |

PRIORITY APPLN. INFO: US 1999-259929 19990301; US
1998-33402 19980302

AN 2000-012999 [01] WPIDS
AB WO 9944583 A UPAB: 20001205

NOVELTY - A method for **modulating** the **immune** response in a mammal to an antigen, comprises implanting within the body of the mammal a **device** comprising a **porous** matrix contained within a perforated but otherwise **impermeable** container. The matrix contains a quantity of the antigen. The **device** attracts cells of the immune system to encounter the antigen and to **modulate** the **immune** response.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) an implantable **device** for **modulating** an **immune** response to an antigen as described above; (2) a method for **obtaining** immune **cells** from a mammal wherein the immune **cells** are **harvested** from a **device** implanted in the mammal comprising a **porous** matrix contained within a perforated but otherwise **impermeable** container; (3) a method of immunizing a mammal with an antigen for the preparation of a hybridoma for the production of a monoclonal antibody against said antigen, wherein the mammal is immunized using the method of (2) and the **device** of (1); (4) a method for the production of hybridomas producing human monoclonal antibodies against a pre-selected antigen comprising: (a) introducing human peripheral blood lymphocytes into the circulation of a severe combined immunodeficient (SCID) mouse and allowing the lymphocytes to populate the immune system of the mouse; (b) implanting in the mouse the **device** of (1) comprising the pre-selected antigen; (c) **harvesting** immune **cells** from the **device**; (d) preparing hybridomas from B lymphocytes present in the **harvested** immune **cells**; and (e) identifying by screening methodology those hybridomas that produce monoclonal antibodies that recognize the pre-selected antigen; (5) a method for transfecting immune **cells** of a mammal with genetic material comprising introducing the genetic material within the matrix of a **device** comprising a **porous** matrix contained within a perforated but otherwise **impermeable** container, the **device** implanted within the body of the mammal; (6) a method for the treatment or prophylaxis of a disease or condition caused by an immune response comprising suppressing the immune response by the method described above; and (7) a method for **modulating** the **immune** response in a mammal to an antigen by implanting a **device** comprising the antigen and means for limiting the passive diffusion of molecules out of the

device without limiting the active movement of immune **cells** into or out of the **device**.

USE - The **obtained** immune **cells** are used for the preparation of a hybridoma for the production of a monoclonal antibody against the antigen. The immune response to the antigen is selected from prophylactic vaccination, therapeutic vaccination, cellular immunity, humoral immunity, mucosal immunity and/or long-term immunity. The processes can be used to treat disease or condition selected from allergies, transplant rejection and autoimmune diseases (all claimed). The **device** can be used to generate an immune response to a polysaccharide antigen.
Dwg.0/33

L23 ANSWER 30 OF 30 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 1982-149225 JAPIO
TITLE: MATERIAL, **APPARATUS** AND METHOD FOR
SEPARATING T CELL
INVENTOR: ABE TSUTOMU; AKAO TSUTAE; IKEDA AKIHIKO
PATENT ASSIGNEE(S): ASAHI CHEM IND CO LTD
PATENT INFORMATION:

| PATENT NO | KIND | DATE | ERA | MAIN IPC |
|-------------|------|----------|-------|------------|
| JP 57149225 | A | 19820914 | Showa | A61K035-14 |

APPLICATION INFORMATION

STN FORMAT: JP 1981-33070 19810310
ORIGINAL: JP56033070 Showa
PRIORITY APPLN. INFO.: JP 1981-33070 19810310
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
Applications, Vol. 1982

AN 1982-149225 JAPIO

AB PURPOSE: To **obtain** T **cell** which is a **cell** participating in the immune reaction, from the suspension of leucocytes, in high purity and yield, without giving **immunological stimulation** to the T **cell**, by using a hydrophobic, water-insoluble **porous** separator having specific **pore** size.
CONSTITUTION: The objective T **cell** separating material for the separation of T **cell** from the suspension of leucocytes, is composed of a hydrophobic and water-insoluble **porous** solid having an average **pore** diameter of not smaller than 500 μ m and smaller than 5,000 μ m. The T **cell** separating **apparatus** is **obtained** by filling a vessel with the separator. The **porous** solid is e.g. a polymer or copolymer of ethylene, styrene, etc. T **cell** is separated by contacting said separator with leucocytes in a liquid containing ≥ 1 g of proteins per 1dl. The protein-containing liquid is preferably the fetus serum of mammals. The separator adsorbs and removes the non-T **cell**, and the T **cell** can be **obtained** selectively and easily.
COPYRIGHT: (C)1982,JPO&Japio

(FILE 'MEDLINE' ENTERED AT 12:35:04 ON 21 JUL 2004)

L24 20238 SEA FILE=MEDLINE ABB=ON PLU=ON "ADJUVANTS, IMMUNOLOGIC"
/CT

10/602785

L25 4042 SEA FILE=MEDLINE ABB=ON PLU=ON CELLS/CT
L26 6 SEA FILE=MEDLINE ABB=ON PLU=ON L24 AND L25

L26 ANSWER 1 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2003461469 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14523425
TITLE: Immunology: dangerous liaisons.
COMMENT: Comment on: Nature. 2003 Oct 2;425(6957):516-21.
PubMed ID: 14520412
AUTHOR: Heath William R; Carbone Francis R
SOURCE: Nature, (2003 Oct 2) 425 (6957) 460-1.
Journal code: 0410462. ISSN: 1476-4687.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Commentary
News Announcement
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200310
ENTRY DATE: Entered STN: 20031003
Last Updated on STN: 20031028
Entered Medline: 20031027

ED Entered STN: 20031003
Last Updated on STN: 20031028
Entered Medline: 20031027

L26 ANSWER 2 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2003461449 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14520412
TITLE: Molecular identification of a danger signal that
alerts the immune system to dying cells.
COMMENT: Comment in: Nature. 2003 Oct 2;425(6957):460-1.
PubMed ID: 14523425
AUTHOR: Shi Yan; Evans James E; Rock Kenneth L
CORPORATE SOURCE: Department of Pathology, University of Massachusetts
Medical School, Worcester, Massachusetts 01655, USA.
SOURCE: Nature, (2003 Oct 2) 425 (6957) 516-21.
Journal code: 0410462. ISSN: 1476-4687.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200310
ENTRY DATE: Entered STN: 20031003
Last Updated on STN: 20031028
Entered Medline: 20031027

ED Entered STN: 20031003
Last Updated on STN: 20031028
Entered Medline: 20031027

AB In infections, microbial components provide signals that alert the
immune system to danger and promote the generation of immunity. In
the absence of such signals, there is often no immune response or
tolerance may develop. This has led to the concept that the immune
system responds only to antigens perceived to be associated with a
dangerous situation such as infection. Danger signals are thought
to act by stimulating dendritic cells to mature so that they can
present foreign antigens and stimulate T lymphocytes. Dying

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mammalian cells have also been found to release danger signals of unknown identity. Here we show that uric acid is a principal endogenous danger signal released from injured cells. Uric acid stimulates dendritic cell maturation and, when co-injected with antigen in vivo, significantly enhances the generation of responses from CD8+ T cells. Eliminating uric acid in vivo inhibits the immune response to antigens associated with injured cells, but not to antigens presented by activated dendritic cells. Our findings provide a molecular link between cell injury and immunity and have important implications for vaccines, autoimmunity and inflammation.

L26 ANSWER 3 OF 6 MEDLINE on STN
ACCESSION NUMBER: 93052728 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1428120
TITLE: Molecular mechanism of methotrexate action in inflammation.
AUTHOR: Cronstein B N
CORPORATE SOURCE: Department of Medicine, NYU Medical Center, New York 10016.
CONTRACT NUMBER: AR 11949-26 (NIAMS)
HL 19721-16 (NHLBI)
SO7 RR05399-30 (NCRR)
SOURCE: Inflammation, (1992 Oct) 16 (5) 411-23. Ref: 98
Journal code: 7600105. ISSN: 0360-3997.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199212
ENTRY DATE: Entered STN: 19930122
Last Updated on STN: 19930122
Entered Medline: 19921222
ED Entered STN: 19930122
Last Updated on STN: 19930122
Entered Medline: 19921222

L26 ANSWER 4 OF 6 MEDLINE on STN
ACCESSION NUMBER: 90259101 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2188143
TITLE: [Electron energy loss spectroscopy (EELS) as a method for the localization of antigens and other substances in cells and tissues].
Elektronen-Energie-verlust-Spektroskopie (EELS) als Methode zur Lokalisierung von Antigenen und anderen Substanzen in Zellen und Geweben.
AUTHOR: Wolf B; Bessler W G
CORPORATE SOURCE: Arbeitsgruppe Medizinische Physik und Arbeitsgruppe Zelluläre Immunologie der Universität.
SOURCE: Die Naturwissenschaften, (1990 Mar) 77 (3) 110-5.
Ref: 34
Journal code: 0400767. ISSN: 0028-1042.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)

Searcher : Shears 571-272-2528

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(REVIEW LITERATURE)

LANGUAGE: German
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199006
ENTRY DATE: Entered STN: 19900720
Last Updated on STN: 19900720
Entered Medline: 19900626

ED Entered STN: 19900720
Last Updated on STN: 19900720
Entered Medline: 19900626

AB The localization of antigens and other substances in cells and tissues by electron microscopy is usually performed by immunohistochemical techniques employing labelled conventional or monoclonal antibodies. For the ultrastructural localization of the antibodies, they are coupled to electron-dense labels like gold or ferritin. Here, we demonstrate a novel method to localize antigens in cells, tissues, and on other supports. By electron energy loss spectroscopy (EELS) it is possible to directly analyze the distribution of antigens, metabolites or other substances without the use of labelled antibodies: as an example we demonstrate the distribution of the immunomodulator lipopeptide in B lymphocytes and macrophages. EELS represents a novel, sensitive, and generally applicable method for the detection and localization of antigens and other substances in biology and medicine.

L26 ANSWER 5 OF 6 MEDLINE on STN
ACCESSION NUMBER: 89283654 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3075081
TITLE: Antiinflammatory and immunoregulatory effects of glucocorticoids: mode of action.
AUTHOR: Rugstad H E
CORPORATE SOURCE: Department of Clinical Pharmacology, Rikshospitalet, Norway.
SOURCE: Scandinavian journal of rheumatology. Supplement, (1988) 76 257-64. Ref: 20
Journal code: 0400360. ISSN: 0301-3847.
PUB. COUNTRY: Sweden
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198907
ENTRY DATE: Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19890721

ED Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19890721

AB In this review emphasis is put on the mechanisms for the antiinflammatory and immunoregulatory role of glucocorticoids in man. Glucocorticoids have numerous effects some of which are permissive; steroids are thus important not only for what they do, but also for what they permit or enable other hormones and signal molecules to do. Some important effects are the result of altered protein synthesis due to steroidreceptor complex formation. One

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such protein is macrocortin which is induced by glucocorticoids. Macrocortin inhibits the enzyme phospholipase A2, thereby reducing the formation of prostaglandins and leukotriens. Steroids also reduce the release or synthesis of plasminogen activator and certain cytokines such as interleukin 1 and macrophage migration inhibitory factor. Glucocorticoids inhibit the release of histamin and lysosomal constituents of possible importance for the inflammatory response. In addition, steroids have profound effects on the circulation and distribution of white blood cells.

L26 ANSWER 6 OF 6 MEDLINE on STN
ACCESSION NUMBER: 76267406 MEDLINE
DOCUMENT NUMBER: PubMed ID: 785256
TITLE: The carrier potential of liposomes in biology and
medicine (second of two parts).
AUTHOR: Gregoriadis G
SOURCE: New England journal of medicine, (1976 Sep 30) 295
(14) 765-70. Ref: 20
Journal code: 0255562. ISSN: 0028-4793.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197610
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19980206
Entered Medline: 19761020
ED Entered STN: 19900313
Last Updated on STN: 19980206
Entered Medline: 19761020

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